the neo Fortecom® Installation Manual

Issue 01 | May 2011

the Rooflight Company

The Professionals' Choice

WELCOME

Thank you for choosing a neo rooflight. We are sure that neo will provide a high-quality finishing touch to your project. This guide is intended to assist building contractors and homeowners in receiving, handling and installing the neo rooflight. Please take the time to read and carefully follow these instructions. Particular attention should be paid to the **'Important Information'** section at the back of this installation guide.

GENERAL

Please note: the minimum roof angle at which neo can be installed is 20 degrees.
Please note: the maximum roof angle at which neo can be installed is 70 degrees.
Please note: the following installation details pertain to COLD ROOF construction and SLATE tile type. Some installation details may vary depending on the roof construction and tile type being used. Always view this manual in conjunction with the cross sectional installation details relevant to your project. See the section 'Suggested installation details' in this manual.

Use the **'Contents'** section to access the specific information you need to install the rooflight. In order to access the information you require in order to install neo you will need to know:

1. The neo rooflight model to be installed.
2. The type of roof construction to be used, e.g. warm roof or cold roof.
3. The type of roof tile to be used, e.g. clay tiles, slate, interlocking tile, pantile, zinc or lead sheet, etc.
4. The thickness of the roof finishes from the top of structural rafters to the general line of the top of the roof finishes.

TEXT- Highlighted in **BOLD** indicates a point of special importance.

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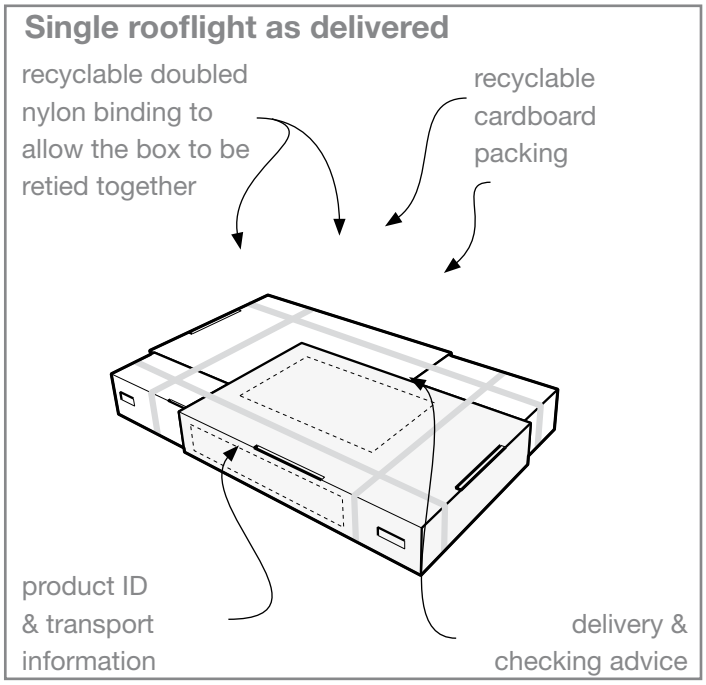
Single rooflight as delivered


recyclable doubled nylon binding to allow the box to be retied together
recyclable cardboard packing
product ID & transport information
delivery & checking advice

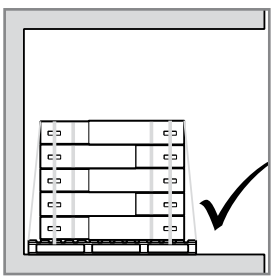
RECEIVING THE ROOFLIGHT

UNLESS the packaging is completely undamaged we recommend that the rooflight packaging is temporally opened to allow inspection of the goods for damage. Follow the instructions on the delivery checking and advice label.

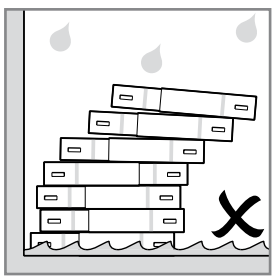
- Once the rooflight has been checked, repackage it in the original packaging for safe storage until the rooflight is to be installed.
- One set of nylon banding is doubled in each direction to allow sufficient material to retie the packaging together.

TRANSPORT & STORAGE

- Keep the rooflight in its original packaging and store off the ground in a secure covered dry place until it is required for installation.
- When transporting the rooflight in its box, carry the box by lifting it from the underside rather than lifting by its strapping.
- Stack multiple units carefully and only as many units high as is set out on the transport information label on the box.
- Only remove the rooflight from its packaging when it is required for installation.
- Once unpacked carry the rooflight by lifting it from the underside of the baseplate.
- Mark the original box with the window number/location and keep all accessories and linings in the original box until they are required. When the installation is complete and all accessories/linings are used, recycle all of the packaging materials.



store in a covered dry secure area



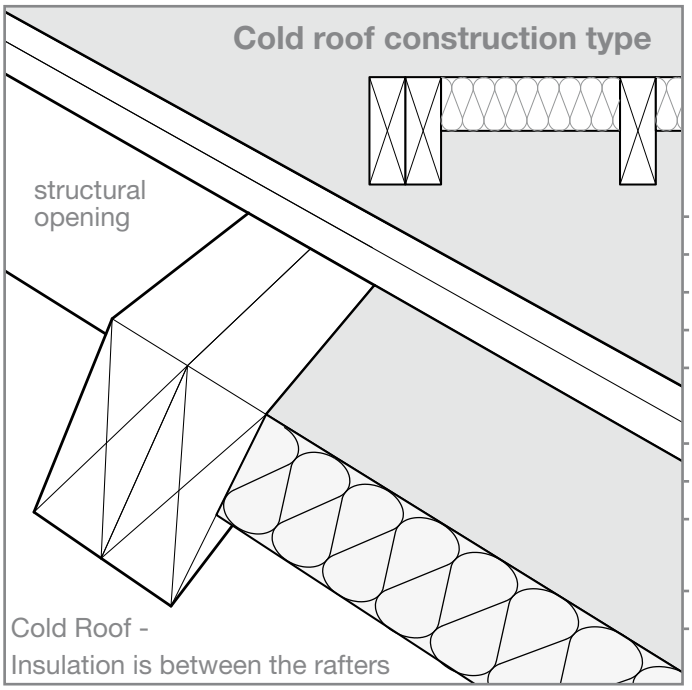
do not stack too high or allow to get wet

TILE TYPE: SLATE AND CLAY TILES

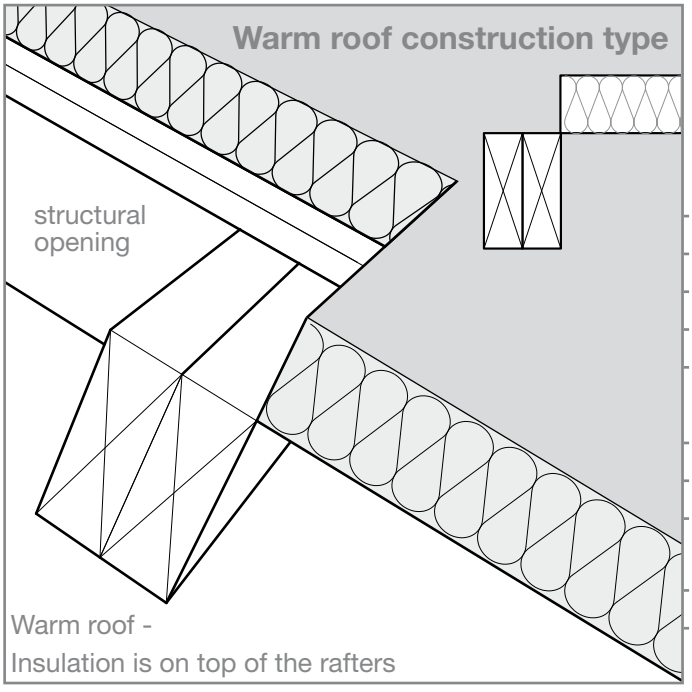
To derive the structural framing dimensions for neo you will need to have the following information to hand:

- The neo model reference number to be installed.
- The type of roof construction to be used e.g. cold or warm.

Follow the appropriate information pathway to derive the structural framing dimensions below.



Rooflight model	Structural framing dimensions Width (mm) x Length (mm)
neo 38P	907 x 1412
neo 57P	907 x 1807
neo 63P	1062 x 1607
neo 94P	1062 x 2102
neo 150P	1387 x 2187
neo 63L	1402 x 1267
neo 94L	1897 x 1267
neo 150L	1982 x 1592
neo 41S	1062 x 1267
neo 93S	1387 x 1592



Rooflight model	Structural framing dimensions Width (mm) x Length (mm)
neo 38P	687 x 1007
neo 57P	687 x 1402
neo 63P	842 x 1202
neo 94P	842 x 1697
neo 150P	1167 x 1782
neo 63L	1182 x 862
neo 94L	1677 x 862
neo 150L	1762 x 1187
neo 41S	842 x 862
neo 93S	1167 x 1187

STRUCTURAL FRAMINGS AND SUPPORTS AROUND THE ROOFLIGHT

Introduction.
There are two main tasks to be undertaken to provide an opening in the roof and structural supports for neo.

1. Forming the **Structural Opening**.
2. Installing the **Structural Bearers**.

▶ The first task undertaken in all installations, whether to a new or existing roof, is formation of a structural opening.
Go to page 8

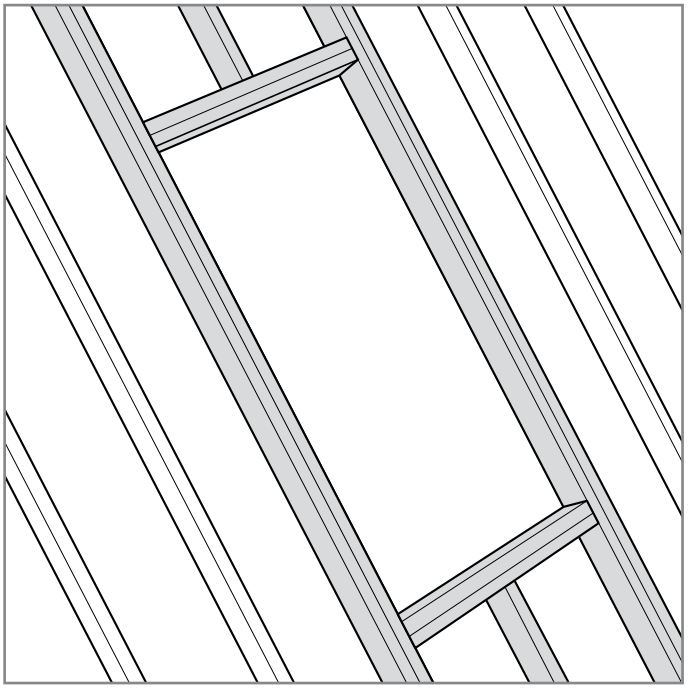
▶ The second task is installation of structural bearers within the formed structural opening.
Go to page 10

Ply linings:

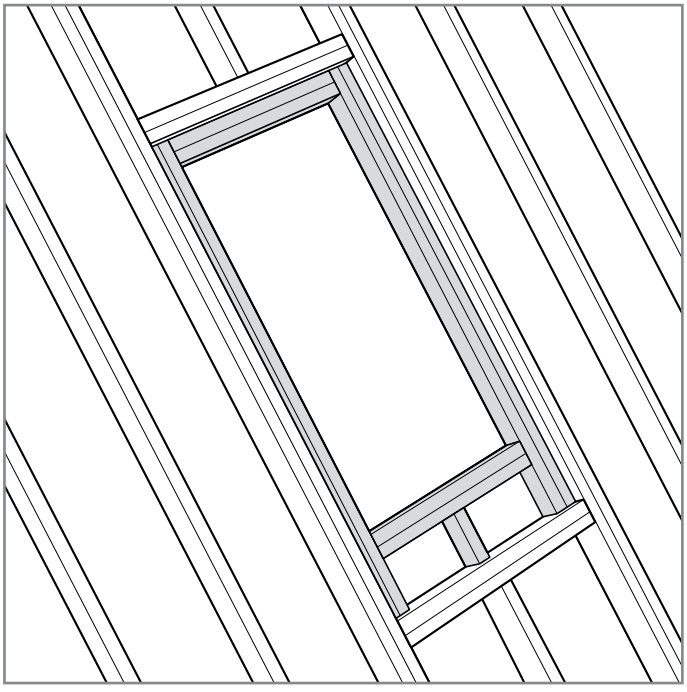
Cold roof - Ply linings are required between the structural supports and structural bearers in all cold roof installations. See section **'Suggested installation details'** in this manual.

Warm roof - Ply linings are required to be fixed outside the structural bearers in all warm roof installations. See section **'Suggested installation details'** in this manual.

1. Forming the structural opening
go to page 8



2. Installing the structural bearers
go to page 10



FORMING THE STRUCTURAL OPENING

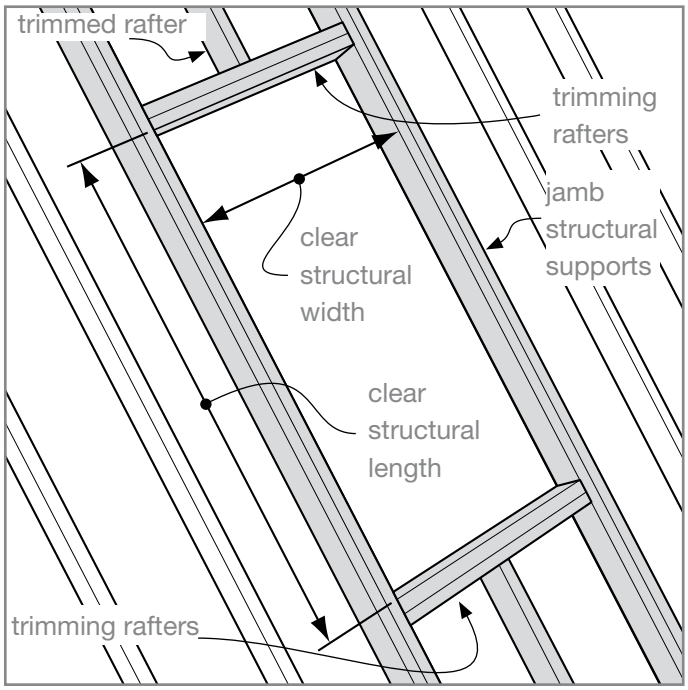
- Forming a structural opening in a roof for a neo is straightforward. The opening is formed using structural members which re-route structural loads from the roof above around the structural opening.

Note: All structural member sizing and fixings around the structural opening are to be as detailed by the Project Architect/Structural Engineer. Our drawings are indicative only.

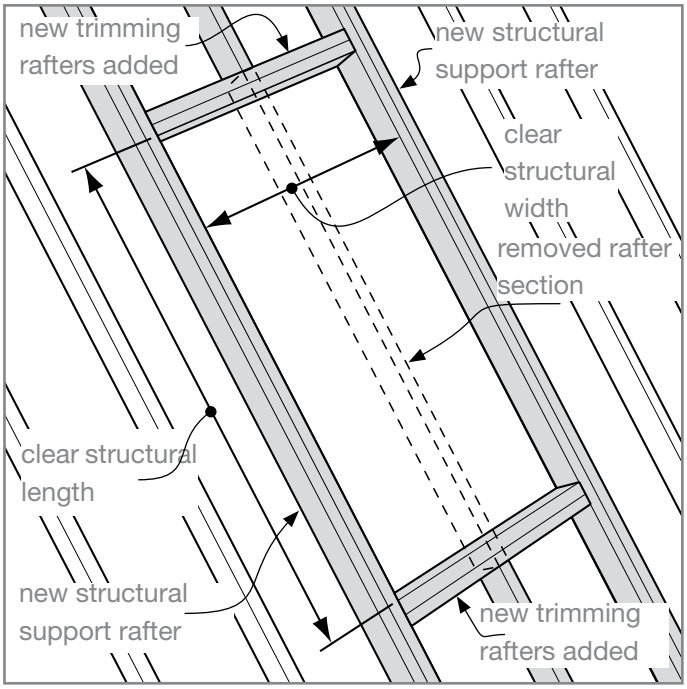
- Where neo is to be installed in a new roof the structural members can be designed to reduce the necessity for cutting and trimming.

- Where neo is to be installed in an existing roof the structural opening may require additional structural members to be inserted and/or existing members cut and re-supported in order to facilitate installation in the location required.

neo - in a new roof



neo - in an existing roof



HEIGHT OF THE STRUCTURAL BEARERS

The intention of this installation guide is to achieve an installation of neo that presents the glazing nominally flush to the general level of the top of the roofing material. Such an install achieves the inconspicuous appearance characteristic of neo.

It is most important that installers read and apply the contents of this section.

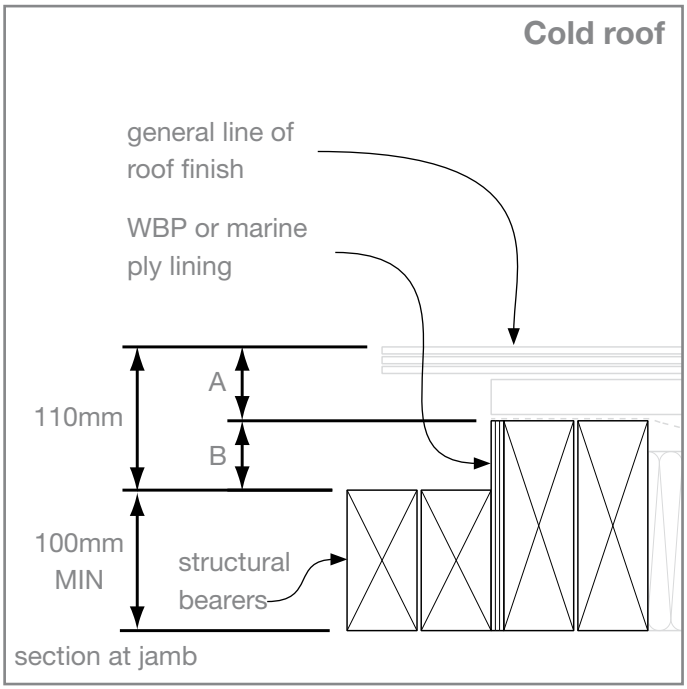
INSTALLING THE STRUCTURAL BEARERS

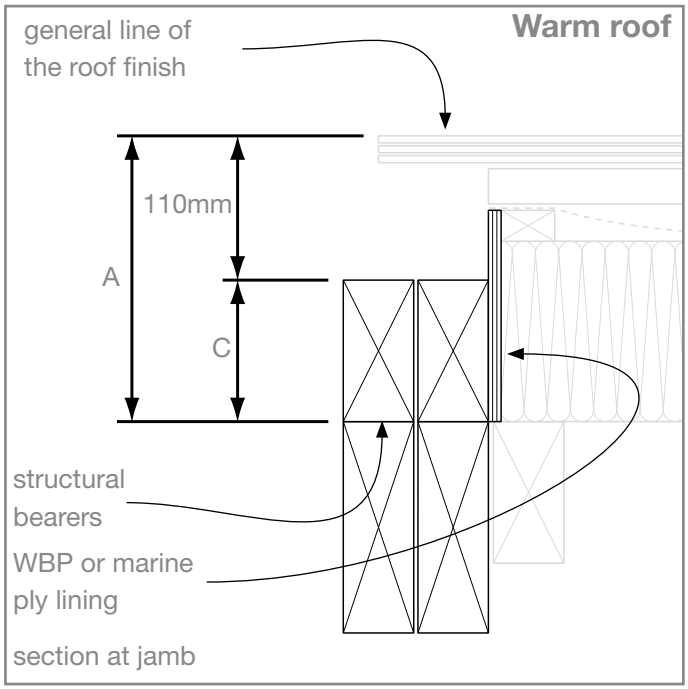
In all installations neo sits on structural bearers once installed. The positioning of the structural bearers is dependant on:

- Roof type (e.g. cold or warm roof)
- Roof finish (e.g. slate, clay tile etc)

For **flush** installation the top of the structural bearers needs to be located **110mm** below the general line of the roof finish. For **cold roof** installation the structural bearers need to be **100mm minimum** height in order to accommodate the rooflight baseplate within the roof cavity.

Please see the worked examples below.





COLD ROOF
(A) Thickness of roof finish (this is the dimension from the top of the structural supports to the general line of the roof finish)
(B) The depth the bearers sit below the structural member

In this example A = 50mm (25mm batten + 25mm slate)
The top surface of the bearers is required to be 110mm below the general line of the roof finish.

Where: B = 110 – A
Therefore: B = 110 – 50 **B = 60mm** (in this example)

WARM ROOF
(A) Thickness of roof finish (this is the dimension from the top of the structural supports to the general line of the roof finish)
(C) The height the bearers sit above the structural member

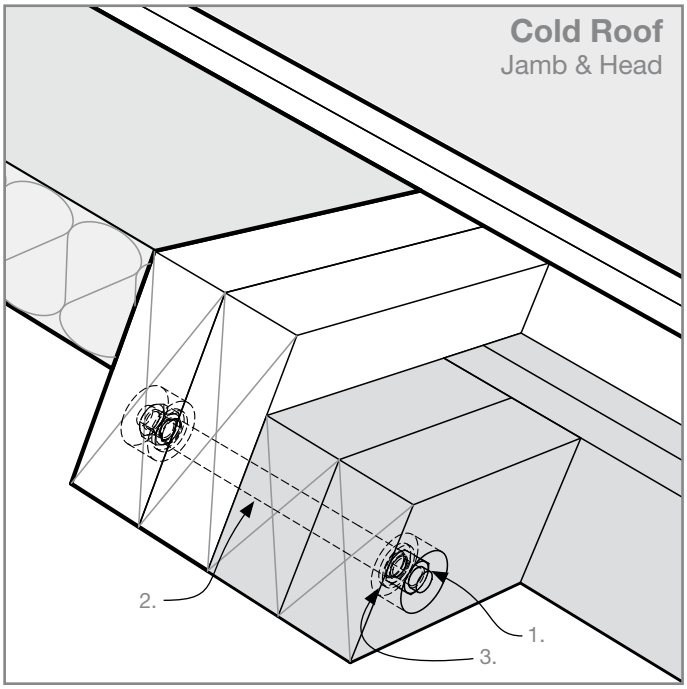
In this example A = 175mm (100mm insulation + 25mm counter batten + 25mm batten + 25mm slate)
The top surface of the bearers is required to be 110mm below the general line of the roof finish.
Where: C = A - 110
Therefore: C = 175 – 110 **C = 65mm** (in this example)

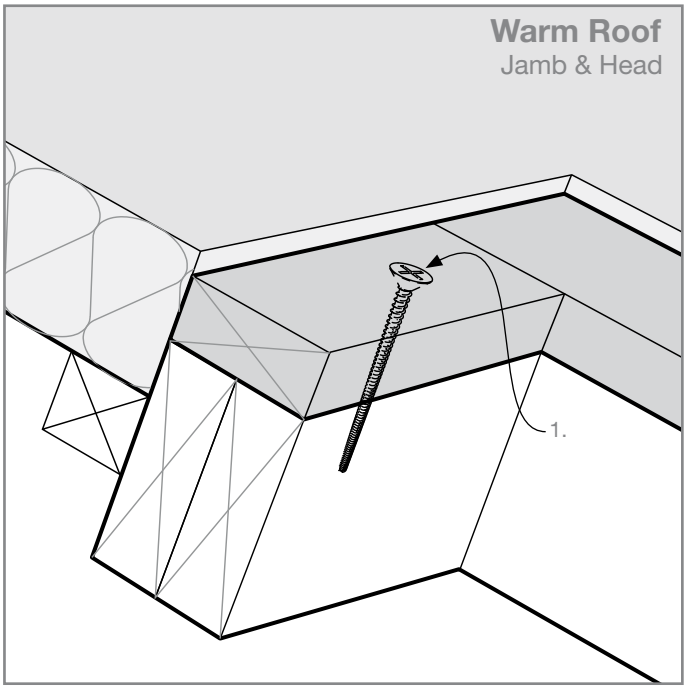
INSTALLING THE STRUCTURAL BEARERS - JAMBS AND HEAD

Once the fixing height of the structural bearers is derived they can be fixed to the main structural supports.

COLD ROOF: The structural bearers at the HEAD and JAMBS of the structural opening are to be two 50mm wide timber members. JAMB structural members bearers extend continuously from head to cill and the HEAD structural bearers are cut to fit within the jamb structural bearers. We recommend use of threaded rod fixings with large recessed washers and locknuts as shown below. Locating fixings at centres as specified by the project Structural Engineer.

WARM ROOF: The structural bearers at the HEAD and JAMBS of the structural opening are to be 100mm wide and fixed directly on top of the structural support and trimming rafters. JAMB structural members bearers extend continuously from head to cill and the HEAD structural bearers are cut to fit within the jamb structural bearers as shown below. Fixing type and spacing to as specified by the project Structural Engineer.





COLD ROOF
On 'thin' roof constructions such as cold roof, neo is installed between the structural supporting rafters.

The structural bearers should be strongly fixed to their flanking structural supports (see note above).

Fixing components:
1. locknut
2. threaded bar
3. washer

WARM ROOF
On 'thicker ' roof constructions such as warm roof, neo is installed on top of the structural supporting rafters.

The structural bearers require to be strongly screwed down onto the structural supports. For larger neo rooflights consider using stainless steel brackets in addition to screw fixings.

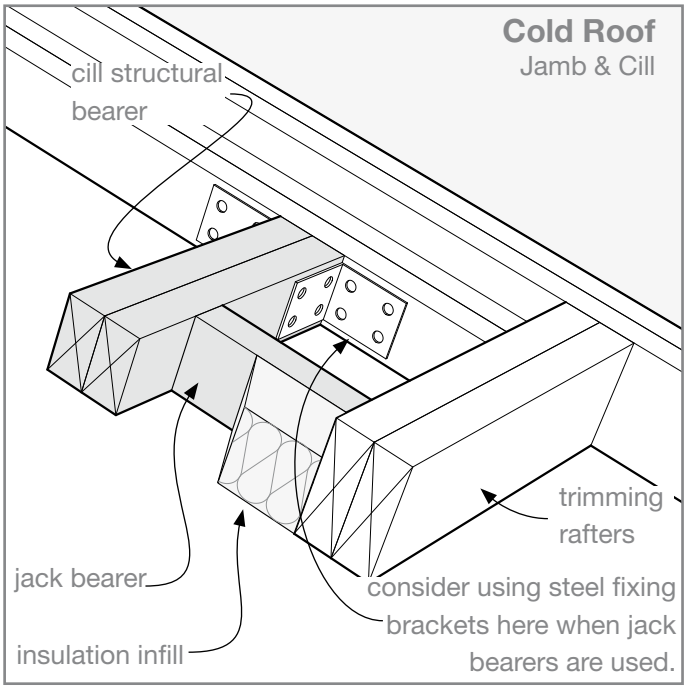
1. screw fixings as specified by projects Structural Engineer

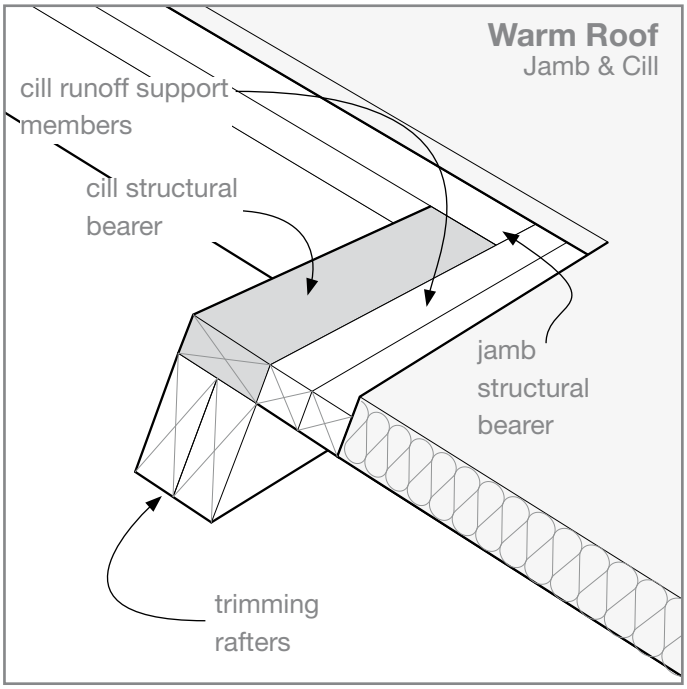
INSTALLING THE STRUCTURAL BEARERS - CILL

Structural bearers at the cill of the structural opening vary in position according to the roof covering type and roof construction method adopted. This is because differing roof tile types / roof constructions have different requirements in respect of the length of runoff at the rooflight cill in order to maintain adequate weathering capabilities.

Fix the structural bearers to the cill of the structural opening in accordance with either the suggested installation details in section **'Suggested installation details'** in this manual or a project-specific detail supplied by the project architect.

Note:
For large neo rooflights the rotational loads placed upon the structural supports in cold roof installations may require stabilisation with strutting or sheathing. Refer the suggested framing details appropriate to the roof type and finish, together with the rooflight weight (see section **'Important information'** in this manual) to a Structural Engineer for checking.





COLD ROOF

On 'thinner' roof constructions such as cold roof neo is installed between the structural support rafters.

The cill structural bearers are located within the structural opening and the cill runoff supporting members are generally located within the structural length.

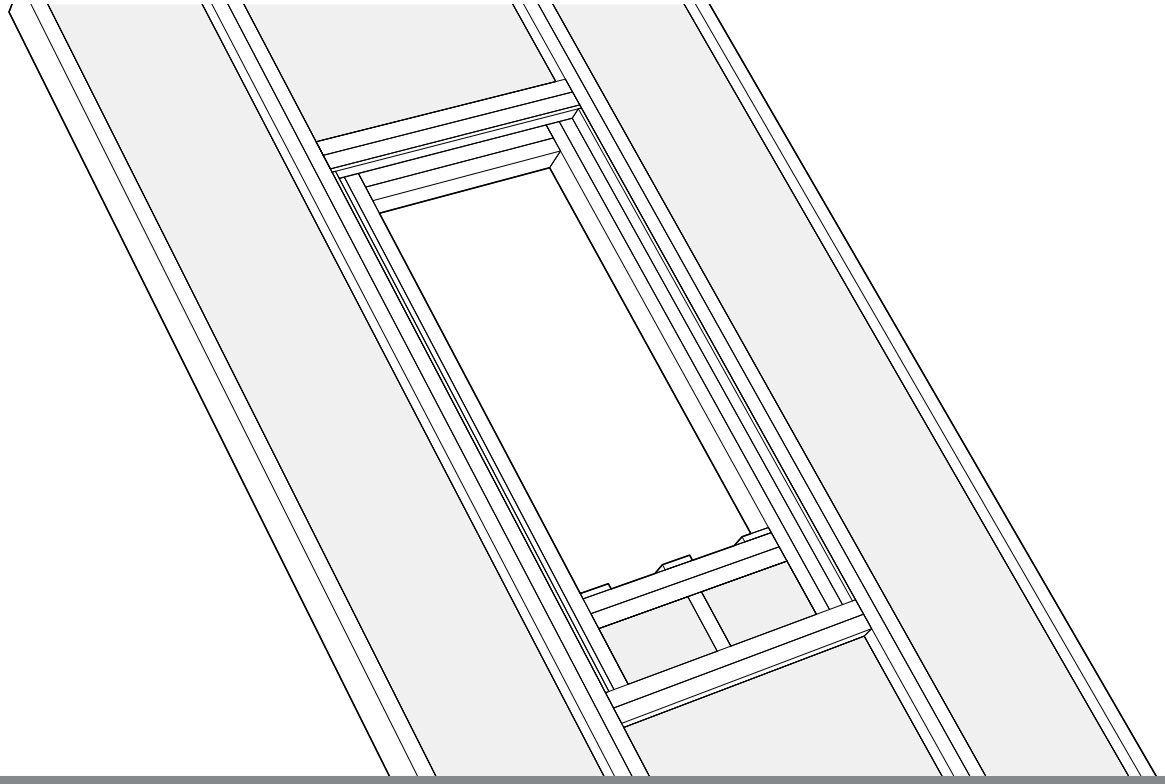
See also the section **'Suggested installation details'** in this manual.

WARM ROOF

On 'thicker' roof constructions such as warm roof neo is installed on top of the structural supporting rafters.

The cill structural bearer is located on top of the structural support members and the cill runoff supporting members are generally located outwith the structural length.

See also the section **'Suggested installation details'** in this manual.

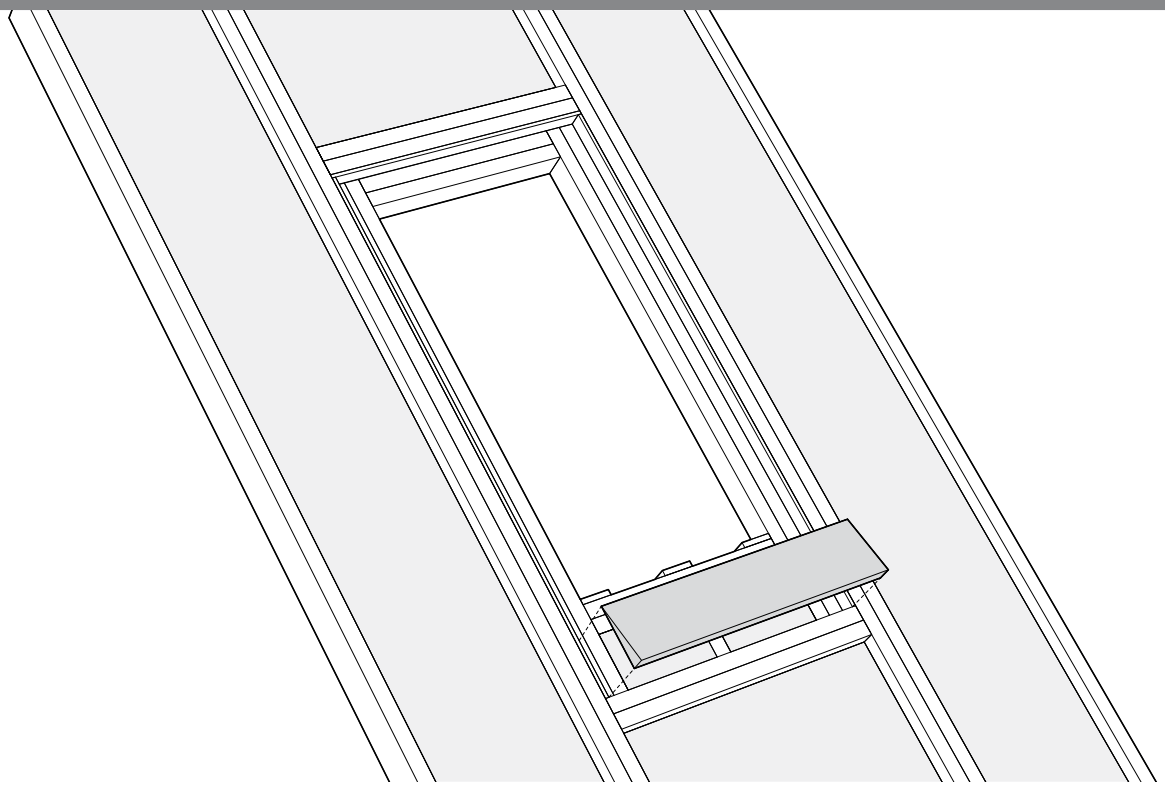


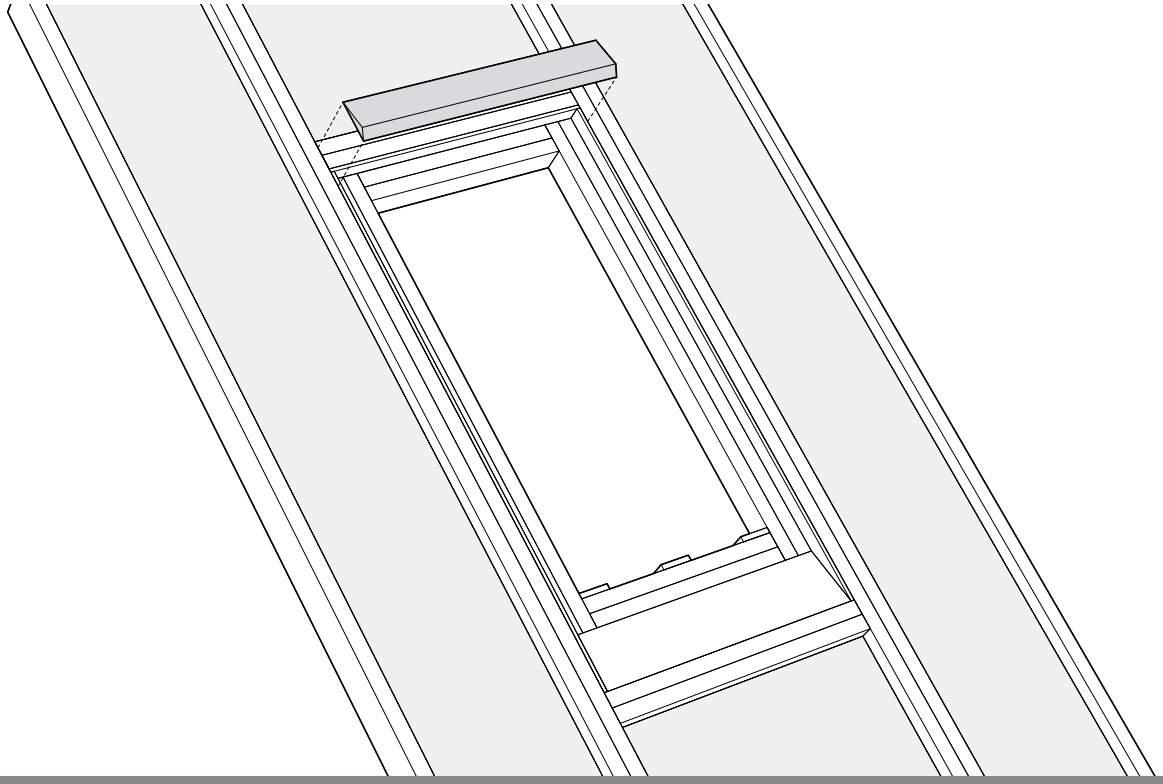
▲ Prepared Opening

Trim the opening within the roof to the correct size required for the model of rooflight being installed.

Install the cill tilting fillet (we recommend hardwood or treated softwood). Its purpose is to support the cill flashing and flashing substrate. Note: Details shown here are for COLD ROOF construction. See section **'suggested installation details'** in this manual for appropriate WARM ROOF detail.

▼ Installing the cill tilting fillet



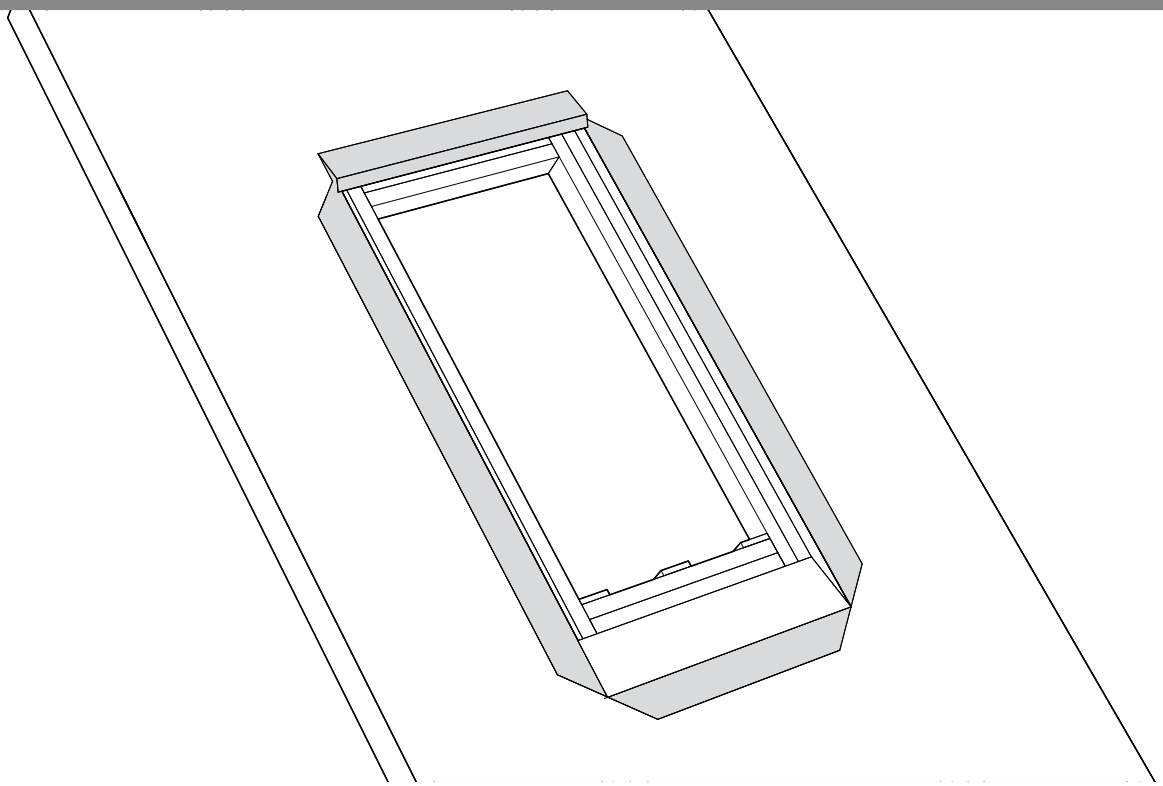


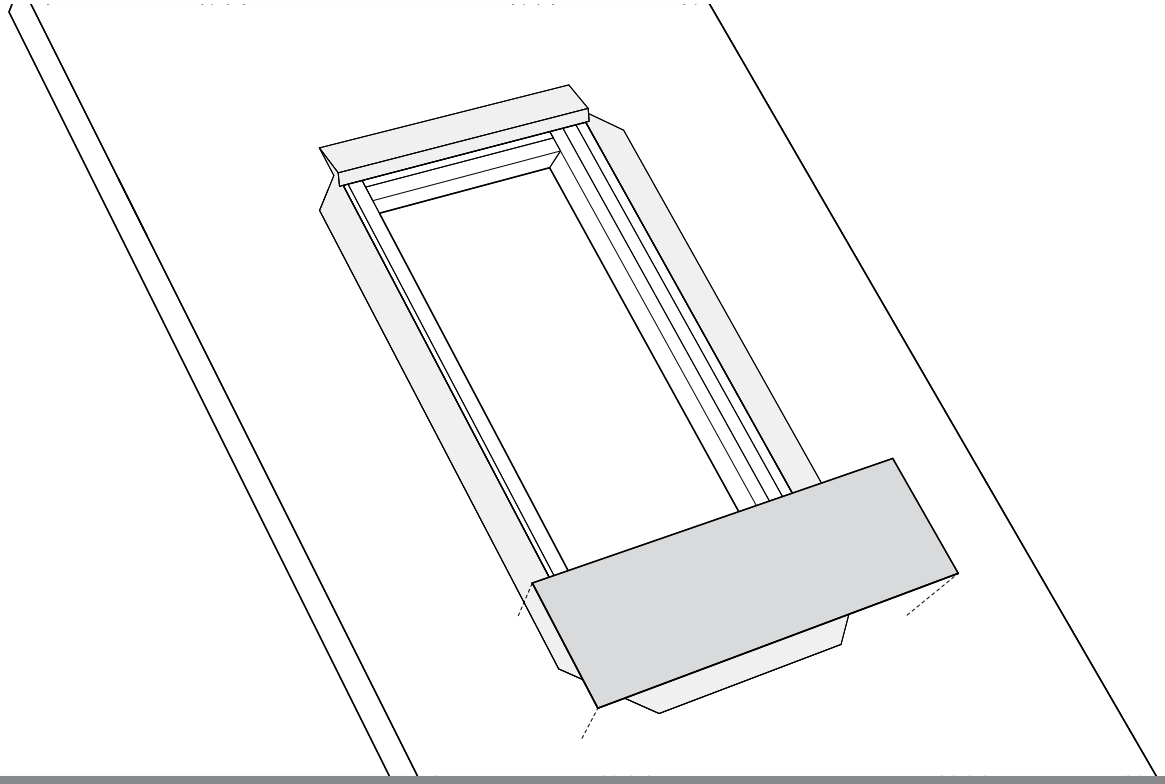
▲ Installing the head tilting fillet

Install the head tilting fillet as shown (we recommend hardwood or treated softwood).

Fold and trim the roofing membrane around the structural opening as shown. If battening at this stage lightly tack the battens at the jambs only.

▼ Trim & finish the roofing membrane



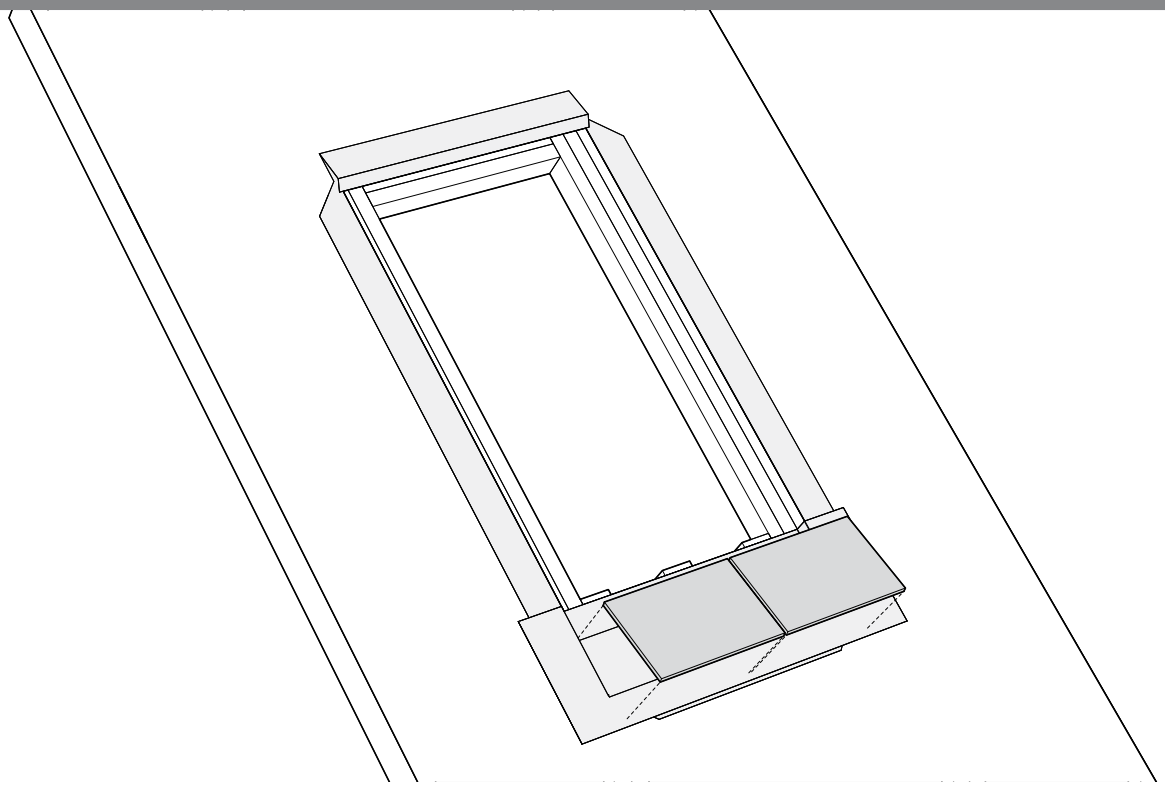


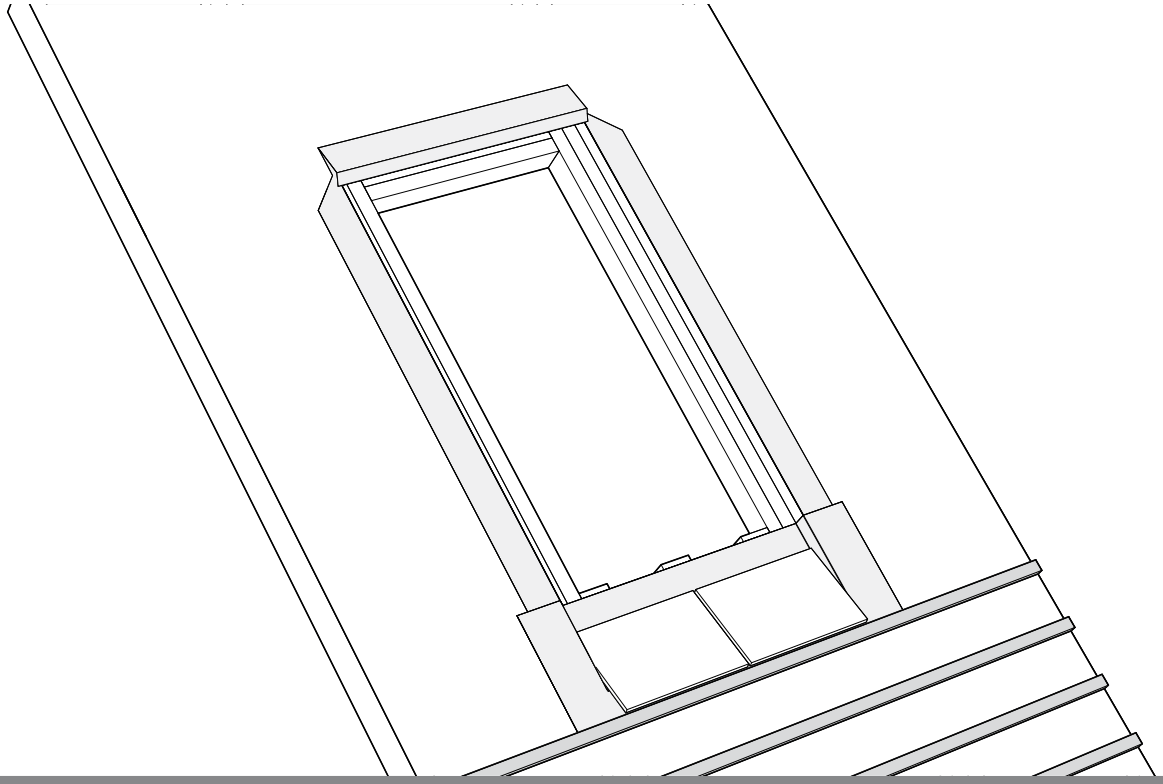
▲ Roofing membrane tray

Install a roofing membrane tray at the cill of the opening as shown. The membrane tray is to pass over the cill tilting fillet and terminate over the general roofing membrane.

Install a 15mm thick WBP or marine-quality ply flashing substrate at the cill of the opening as shown. It is to be installed over the membrane tray shown above and of sufficient length to ensure that the cill flashing finishes at the height of the cill rooftiles. Ensure a 5mm MIN gap between the 2 halves of the substrate.

▼ Cill flashing substrate



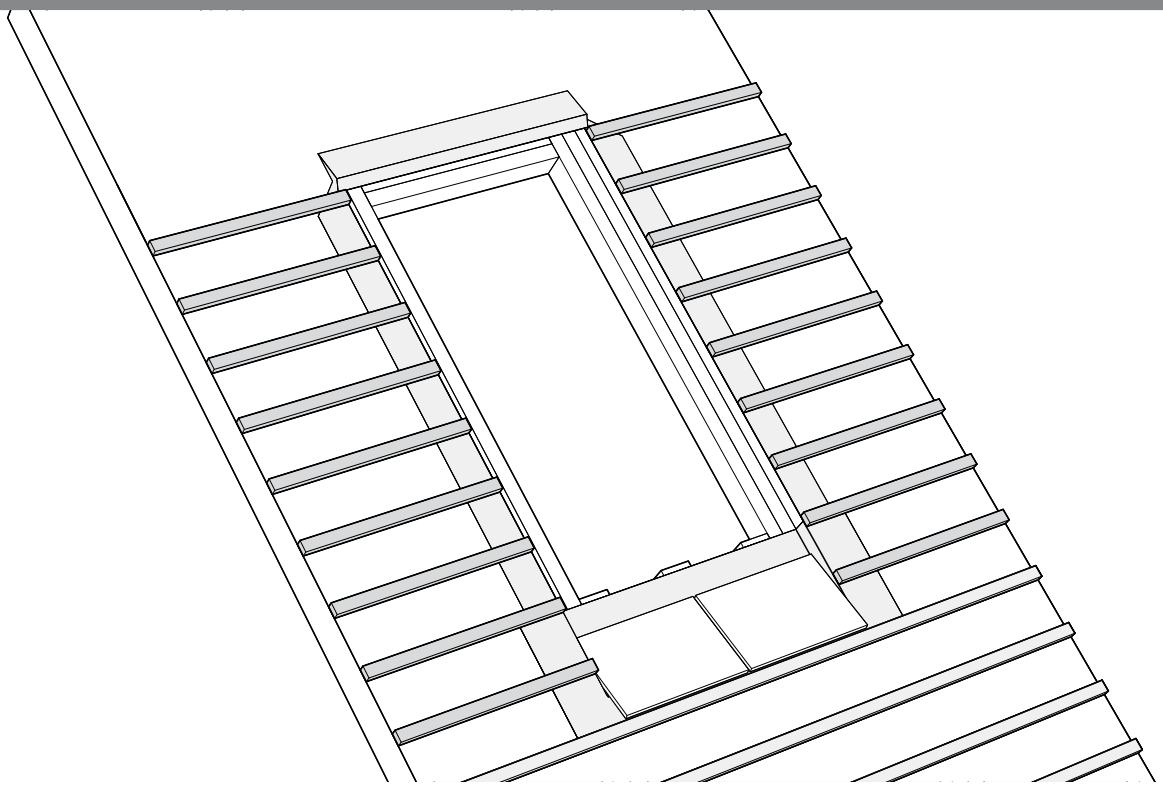


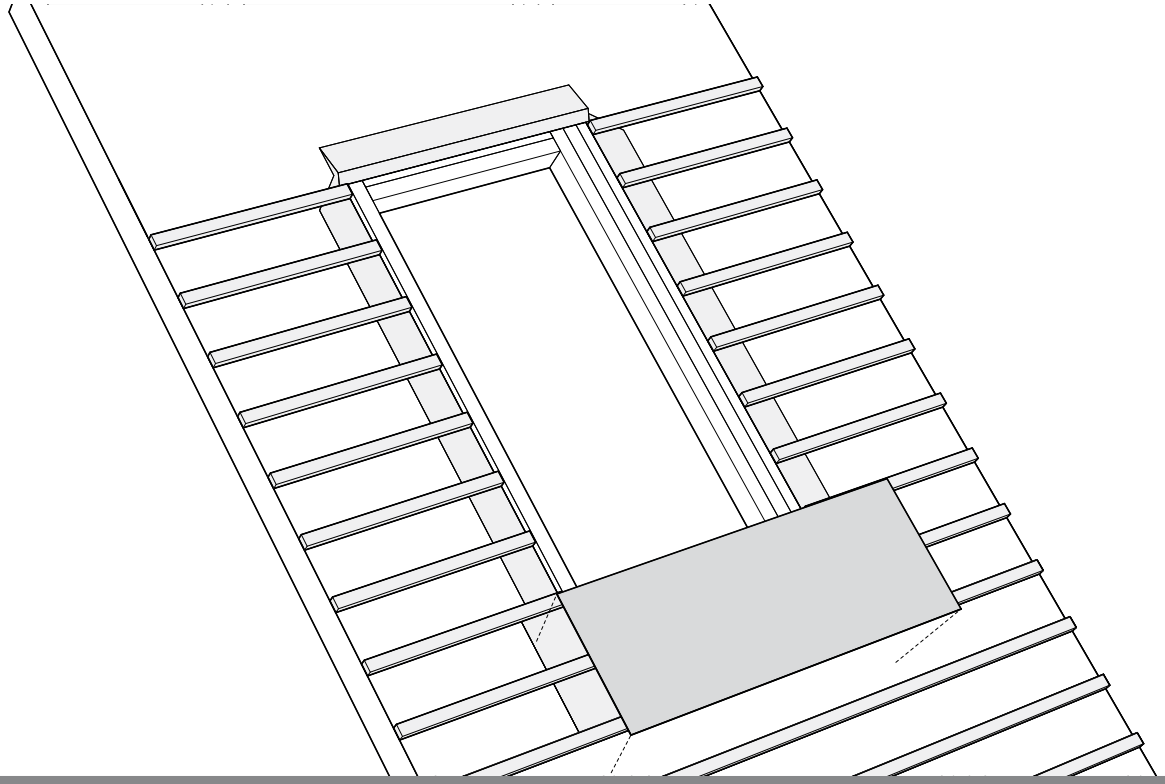
▲ Battening up to the cill

It is recommended that the roof is battened up to the cill of the opening at this stage. Ensure that the roofing membrane tray which was previously fitted is located underneath the battens. Batten spacing is determined by the roof covering being used. Adjust the battening and tiling to course and fit around the structural opening.

When battening around the opening the battens at the jambs are to come up to the outside faces of the structural opening (COLD ROOF) as shown. Whilst installing these make sure that the ends of the battens are only 'tacked' in place at this stage. This is to ensure the rooflight is weathered in correctly at a later stage of the installation.

▼ Battening up the jambs



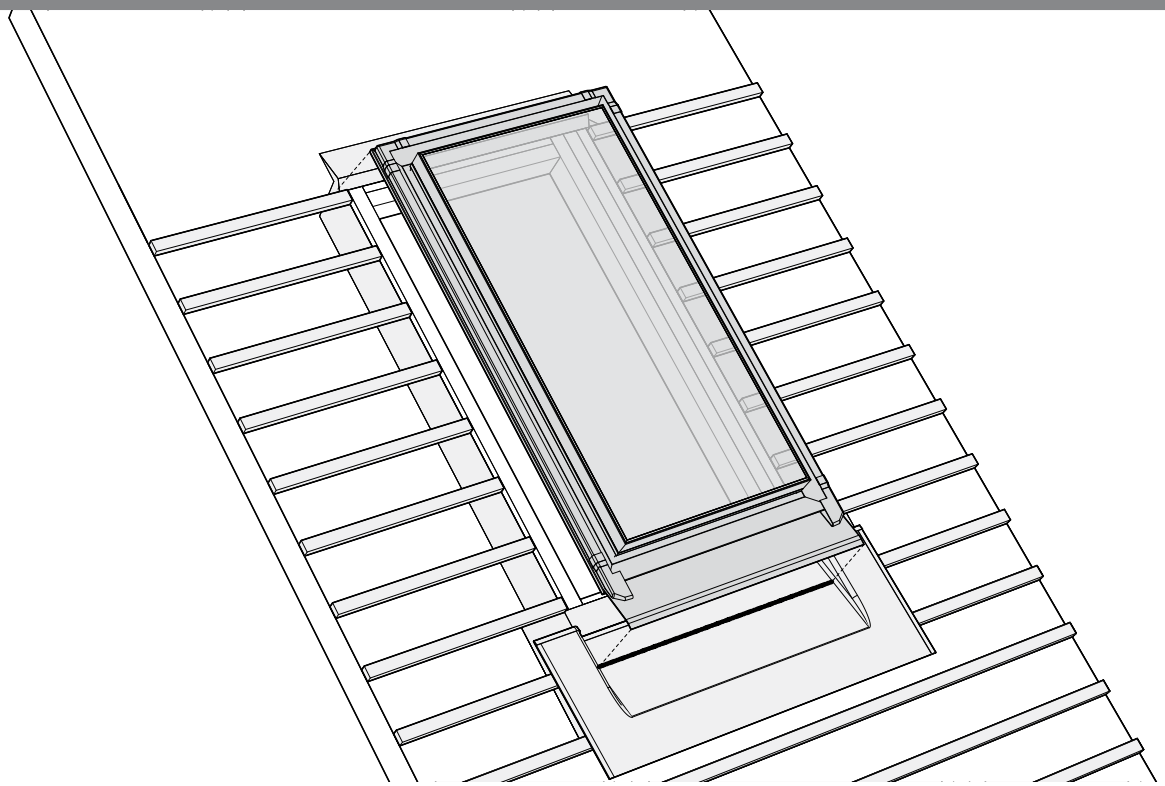


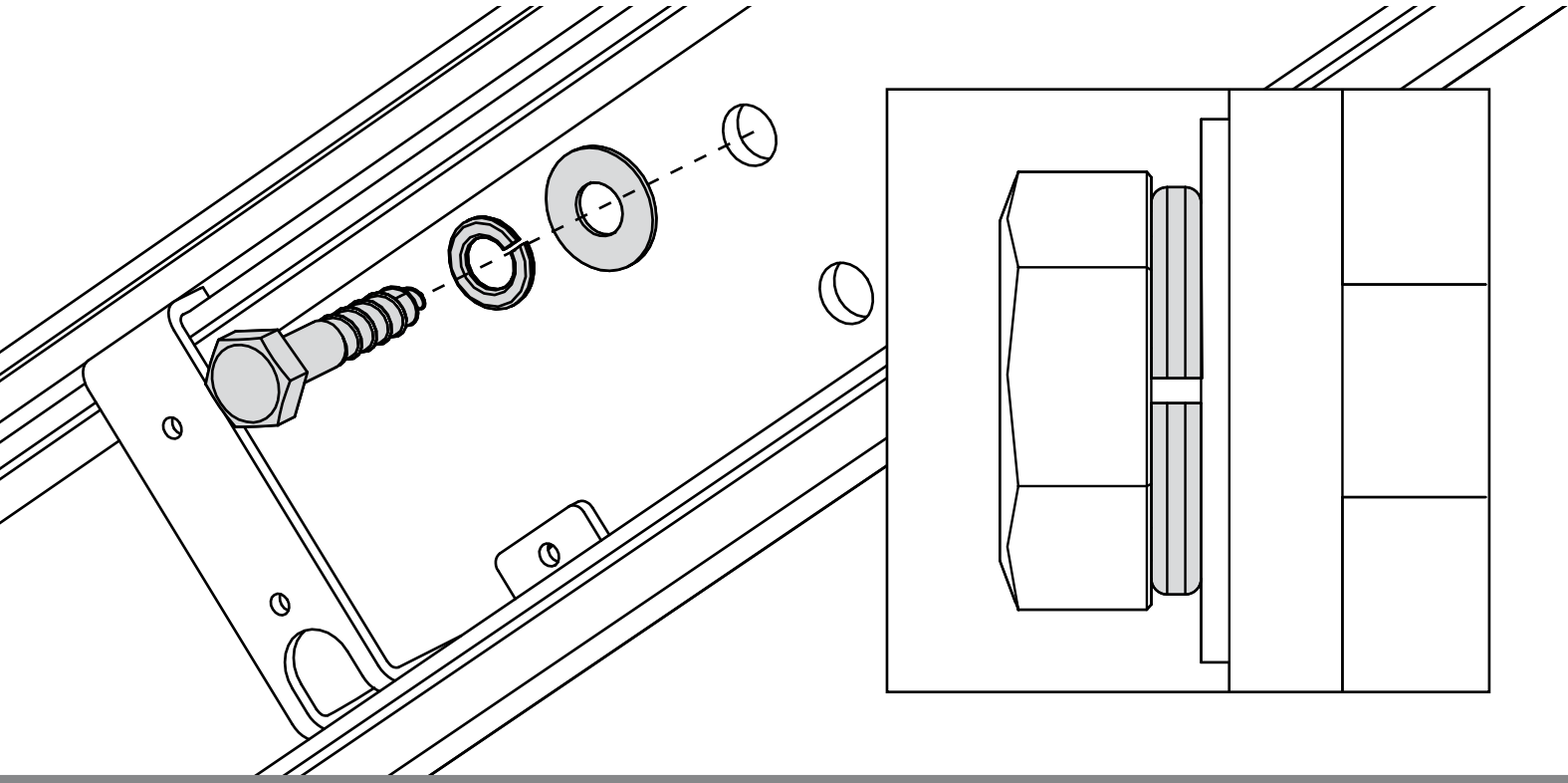
▲ Lead cill flashing

Install a code 3-5 lead flashing (depending upon the weather exposure) to the cill of the opening as shown. Side lap to be minimum 150mm. Length of flashing to be sufficient to give the tile-recommended headlap. Lay a continuous thick bead of low-modulus neutral cure silicone along the flashing.

Lift the rooflight into the opening being careful NOT to pick the rooflight up by the perimeter extrusion or cill flashing.
If your rooflight model has a motorised configuration, be sure to allow enough room the cill of the rooflight for the cable to escape the frame without becoming trapped or over-twisted.

▼ Installing the rooflight





▲ Fix

Locate all of the fixing points at the perimeter of the rooflight. Drill pilot holes and fix the coach bolts with a large flat washer and a spring washer through and into the structural bearers. ONLY TIGHTEN THE COACH BOLTS UNTIL THE SPRING WASHER HAS FLATTENED OUT. **OVER TIGHTENING OF THE COACH BOLTS CAN CAUSE DAMAGE TO THE ROOFLIGHT FRAME**. Ensure all marked fixing points are used.

Install a thick continuous fillet of low-modulus neutral cure silicone to full length and width of the jambs and head of the rooflight perimeter as shown.

▼ Perimeter silicone fillet

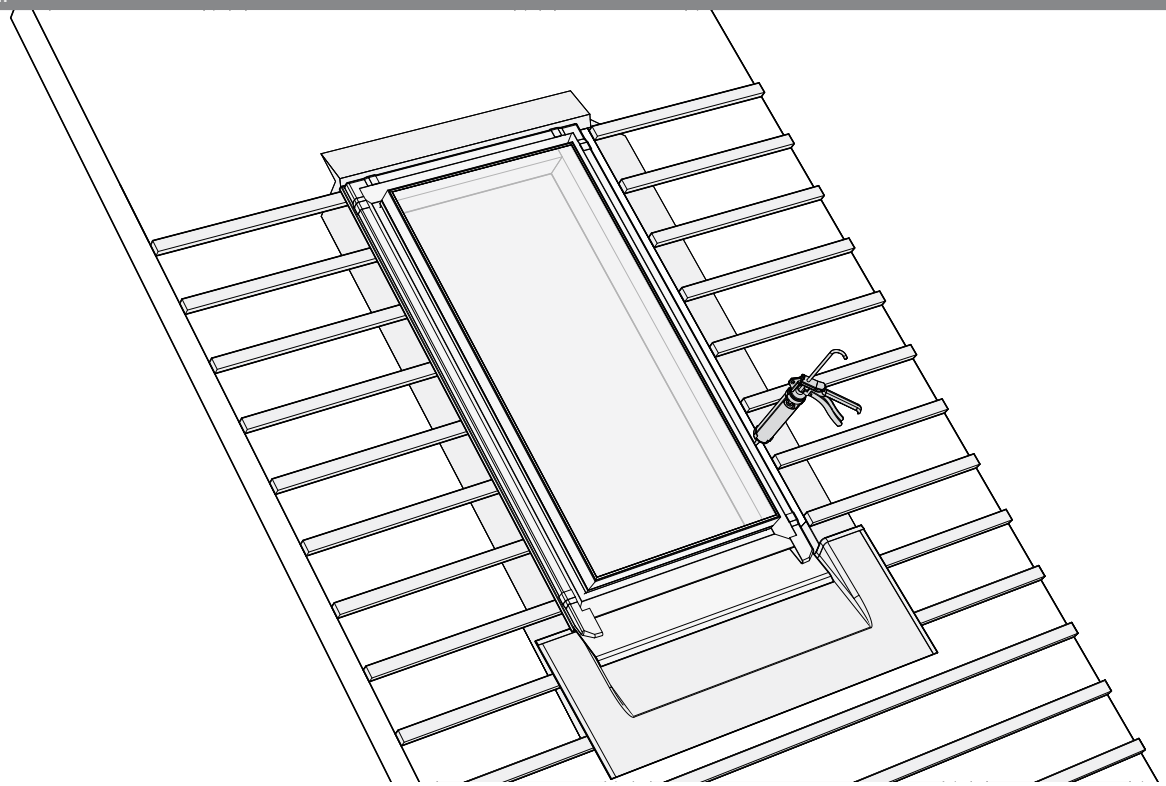


Image A

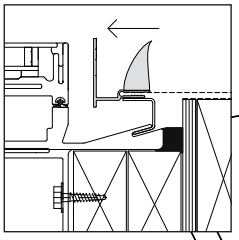


Image B

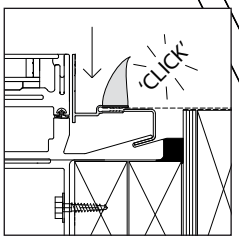
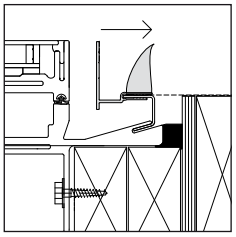
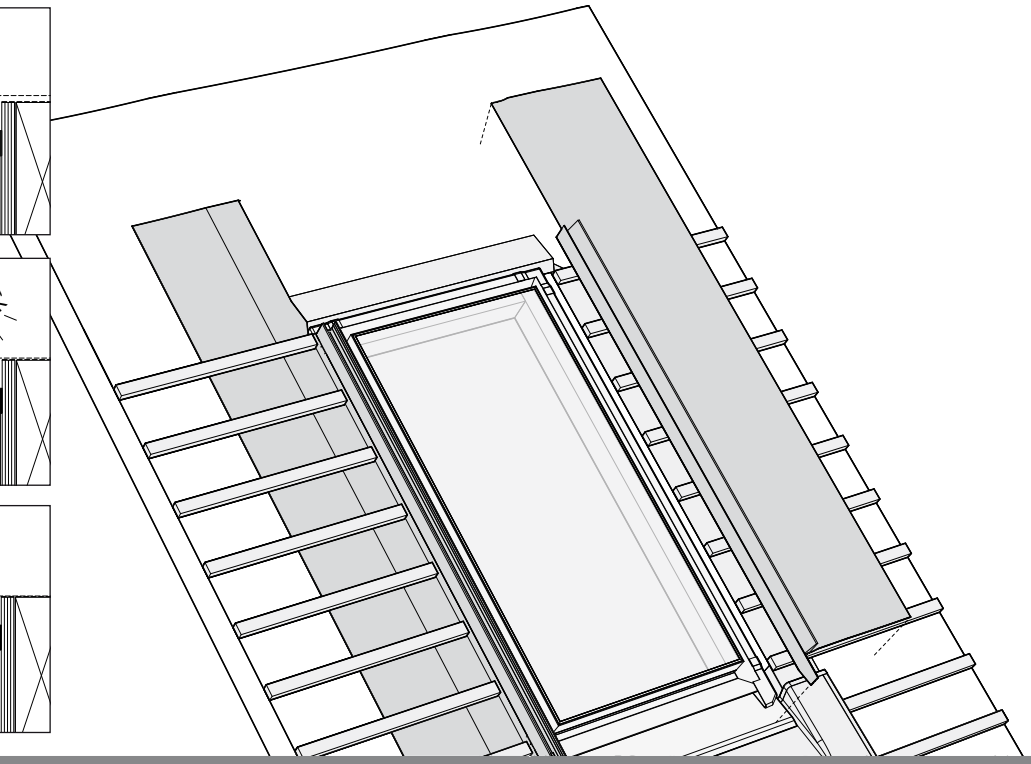


Image C





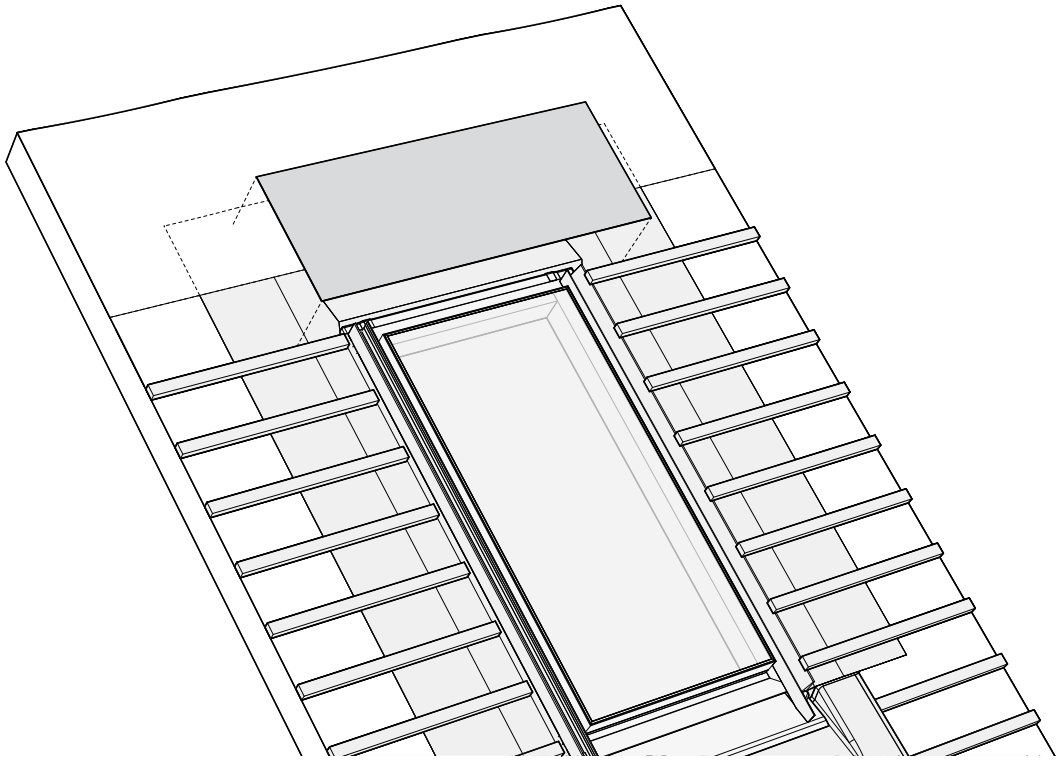
N.B. Installation of the jamb flashing can be facilitated by opening the rooflight casement (model dependent).

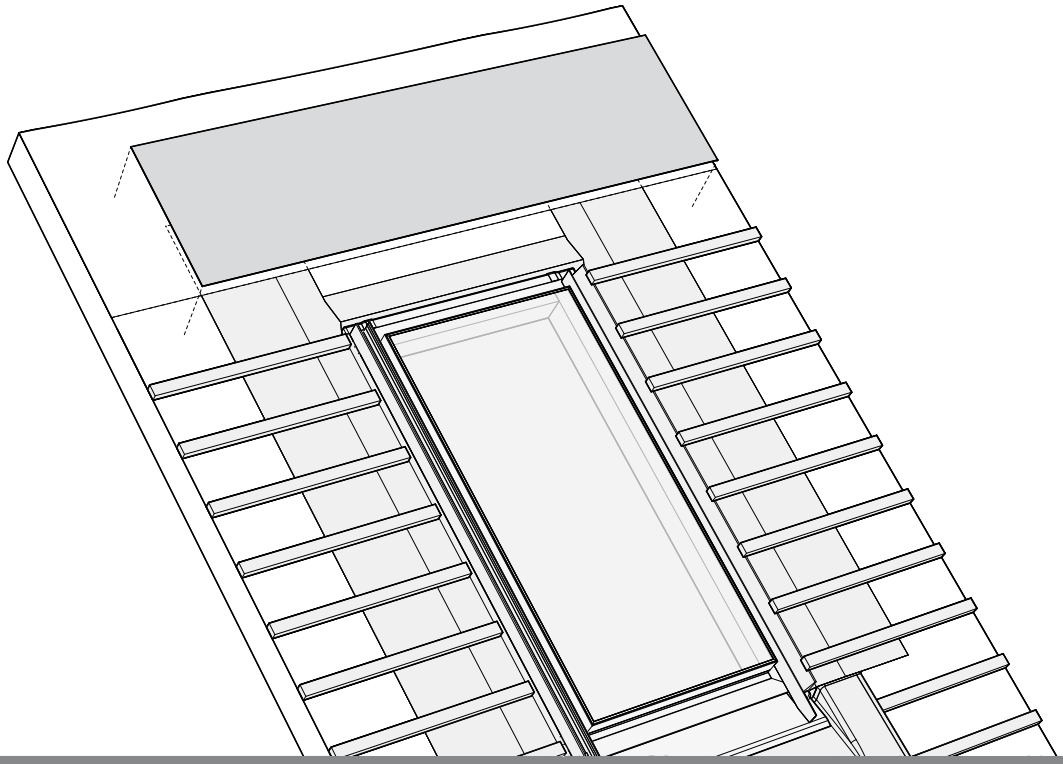
▲ Installing the jamb flashing

Orientate the jamb flashing over the jamb extrusion as shown in image A. Grasp the extrusion in the middle and pull the flashing back toward the rooflight slowly until it clicks (image B). Next push the flashing back outward toward the battens to engage the flashing onto the extrusion (image C). Ensure the flashing bites onto the rooflight extrusion - push the top and bottom of the flashing into place. The excess felt on the jamb flashing should be positioned toward the head of the rooflight as shown.

The felt attached to the jamb flashings should go OVER the general roofing membrane but UNDER the battens which may be in place. Repeat for the opposing side. Next, lay the head flashing over the head fillet. Fold, boss and tuck the flashing back into the baseplate rollover. There may be a requirement to trim the head flashing around the jamb battens depending upon their positioning.

▼ Install the head flashing



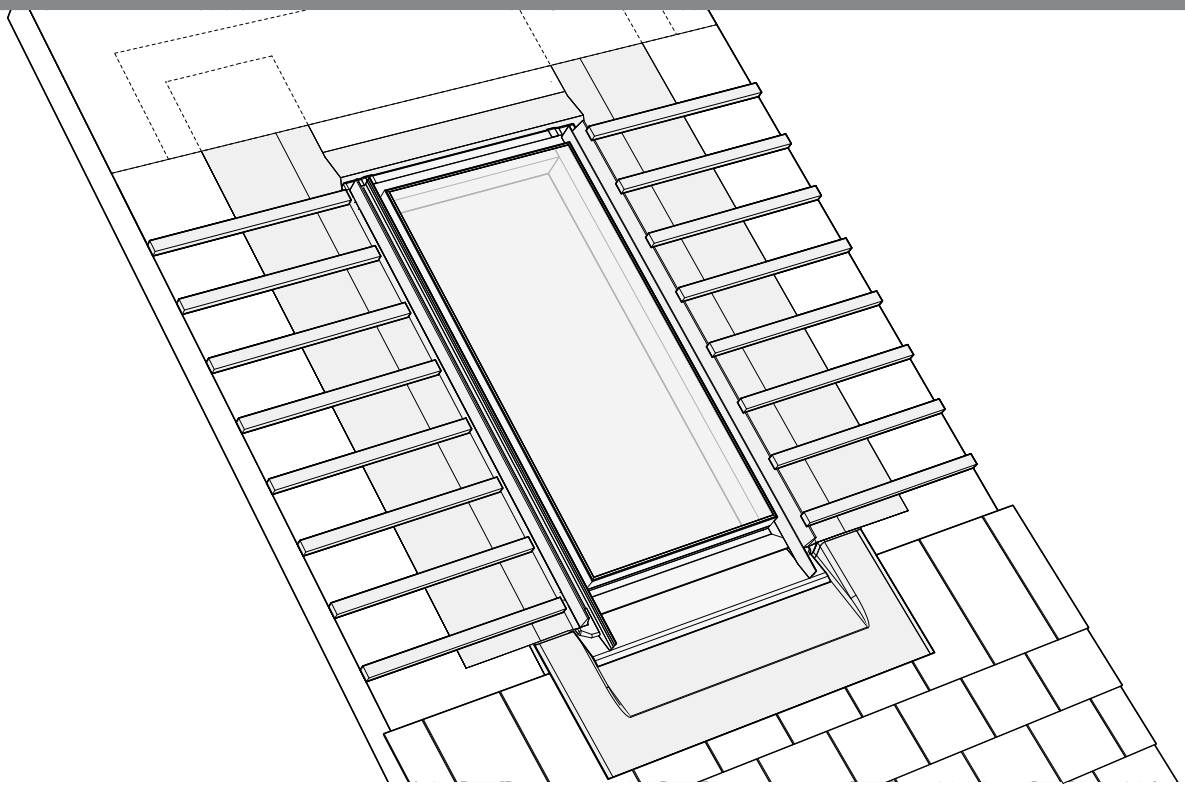


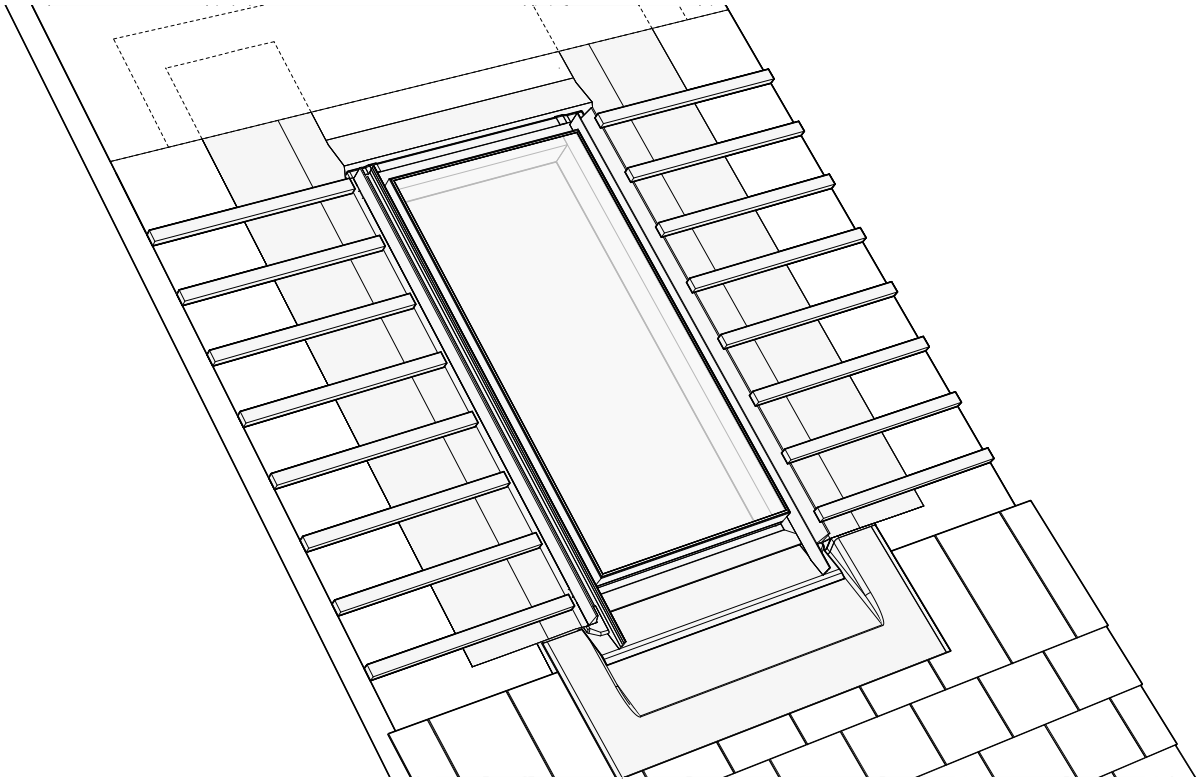
▲ Install the head roofing membrane

Lay the strip of roofing felt over the head flashing and ensure it tucks UNDER the next lap in the general roofing membrane.

The combination of the head flashing and the roofing felt being lapped in this way, ensures moisture will run up and over the tilting fillet, onto the baseplate and finally off the roof.

▼ Weathering



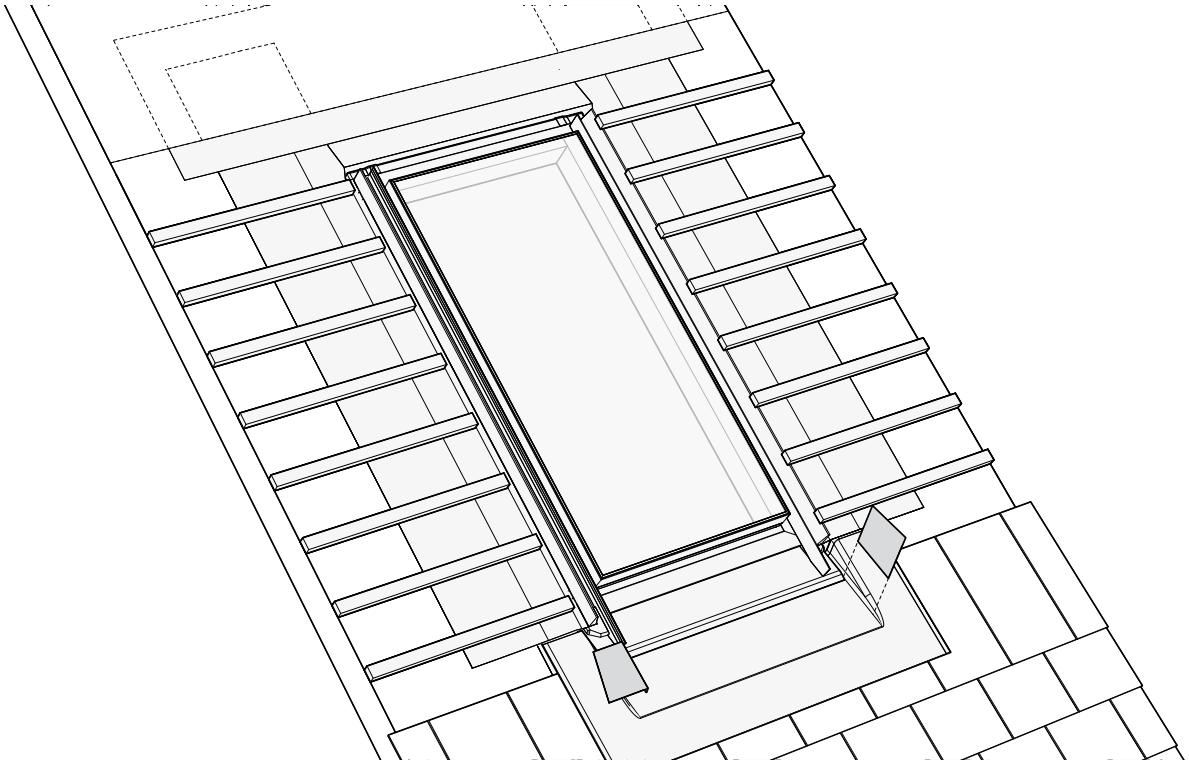


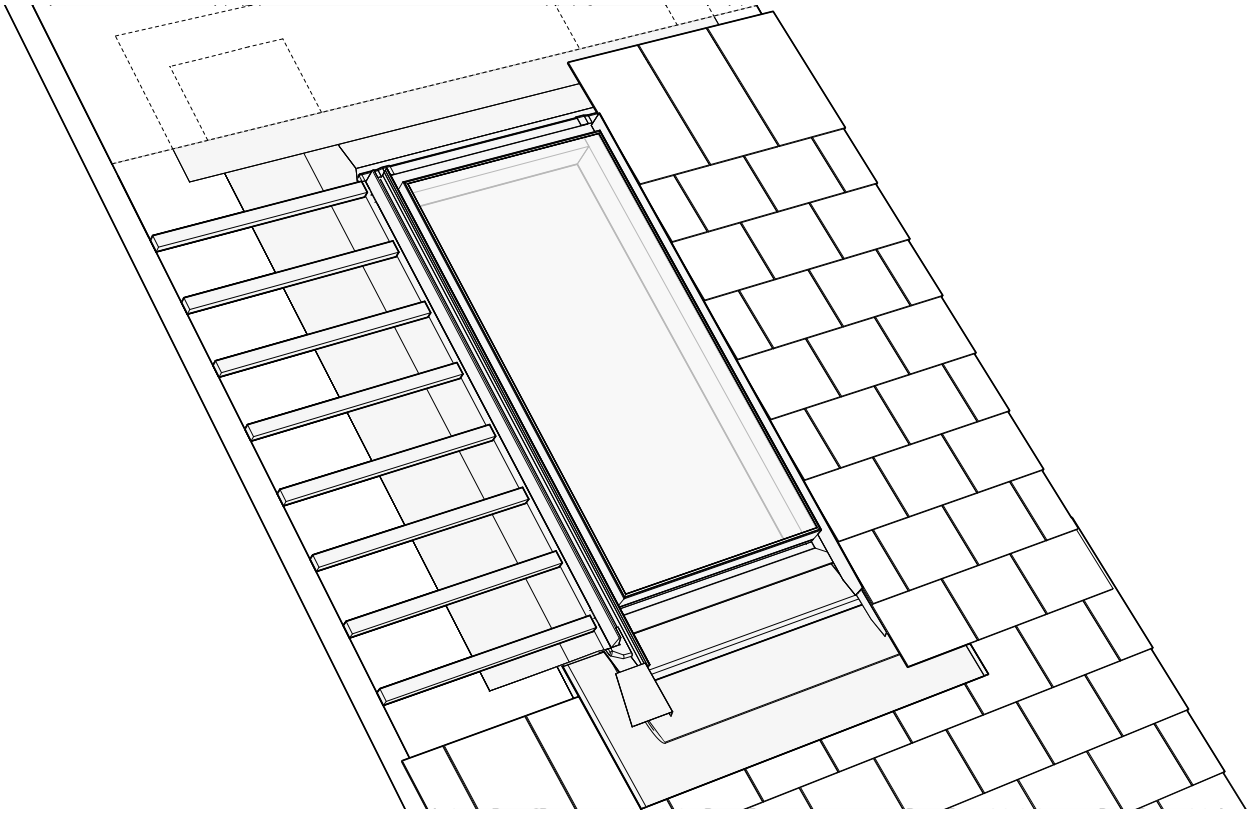
▲ Weathering

Before continuing the installation, verify that the roofing felt and flashings are correctly installed. After this point, the roof will need to be stripped-back to make any amendments.

▼ Soakers

When laying the second course of tiles at the jambs, soakers are required; one per jamb. Lay the soaker flashing over the edge of the cill corner and form the soaker, ensuring it tucks BEHIND the jamb flashing extrusion as shown.



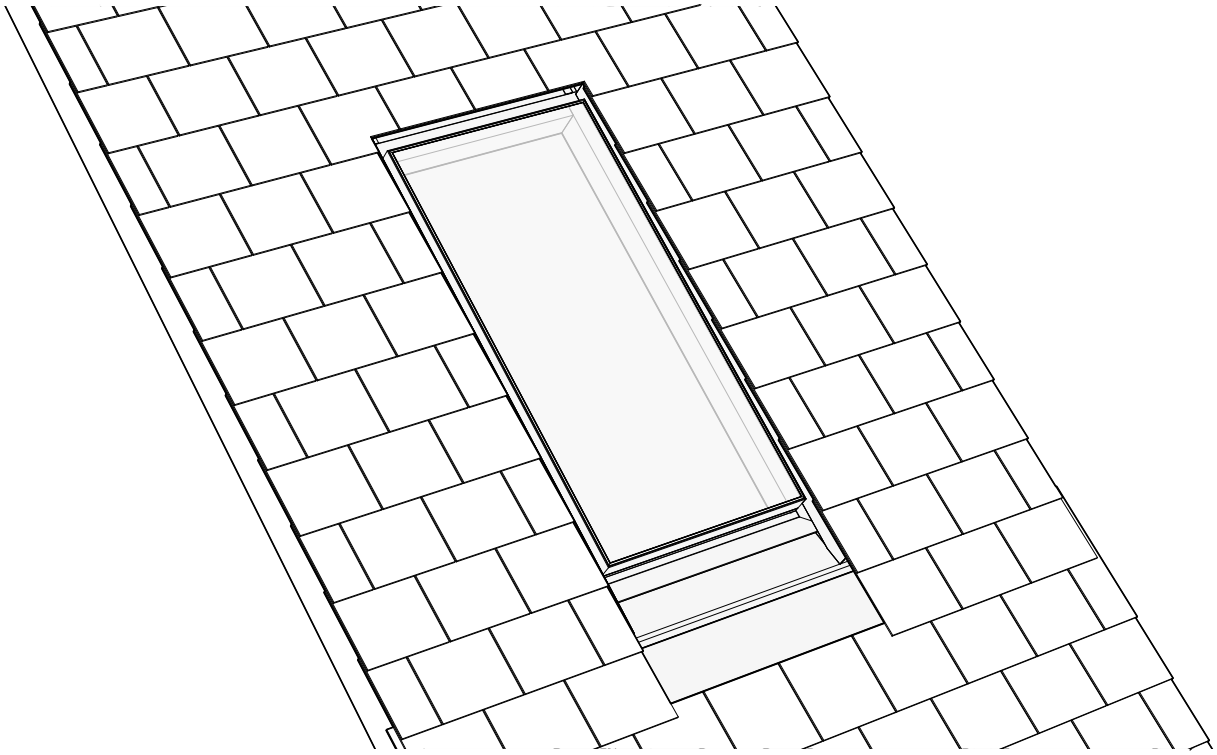


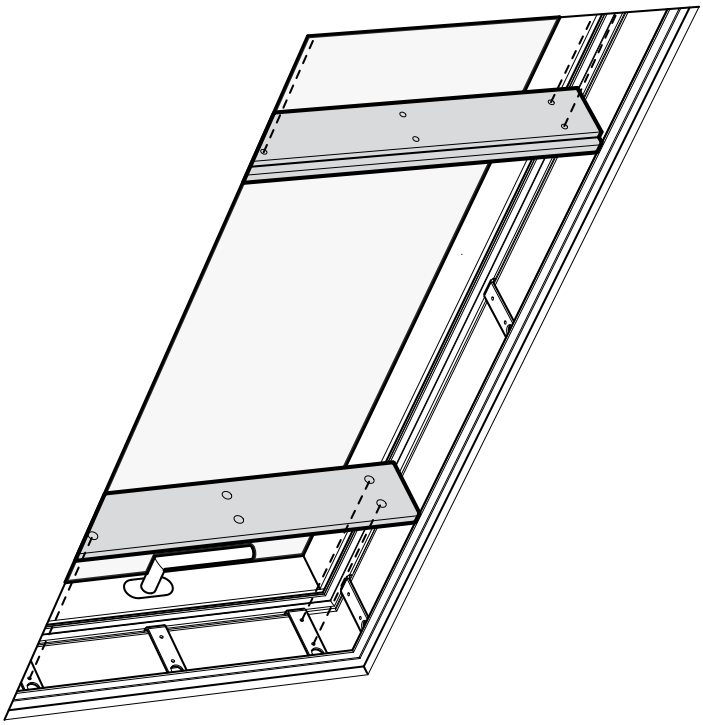
▲ Tile the jambs

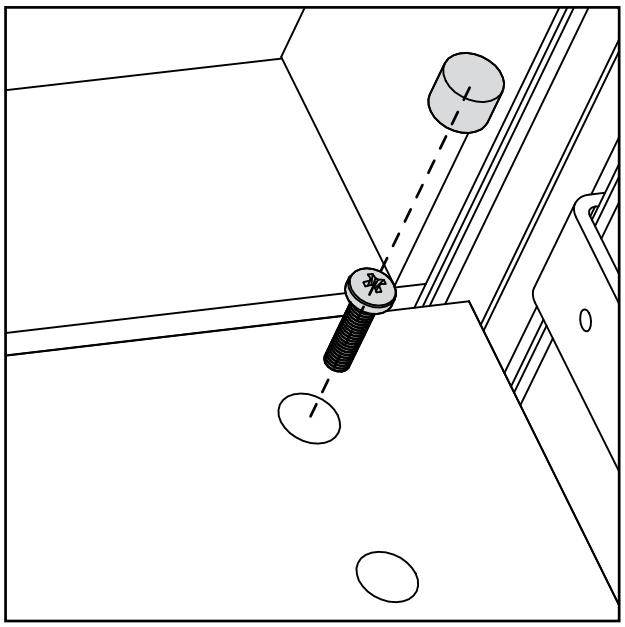
Use the edge of the jamb flashing as a guide to tile up to and tile the jambs. Ensure the weathering foam attached to the jamb flashings is folded down and away from the rooflight when laying the tiles.

The head of the rooflight can now be tiled.. We recommend the use of eaves tiles. Complete the tiling around the head of the rooflight accordingly.

▼ Complete the tiling





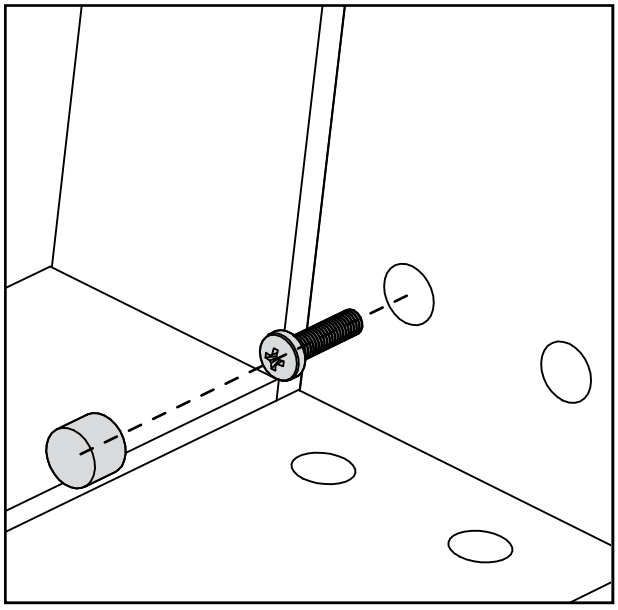


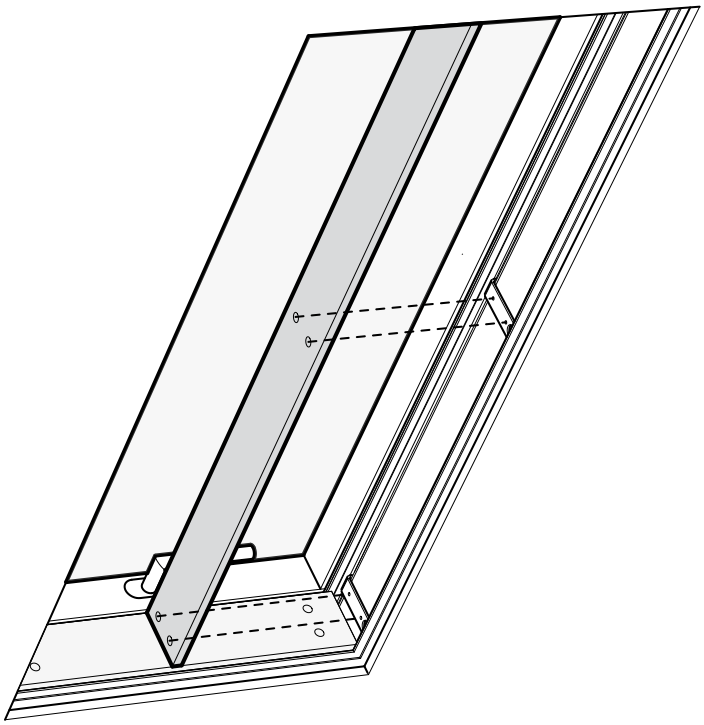
▲ Baseplate linings- Head and Cill

Install the cill and head linings as shown. Orientate the lining with the fixing holes aligned to the securing brackets located in the rooflight baseplate recess. (as shown by the dashed line in the above image). Secure in place using screws provided. Cover the screw heads by inserting the timber plugs until flush to the surface of the lining.

Install the jamb linings as shown. The installation method is the same as that used for the head and cill linings.

▼ Baseplate linings - Jamb



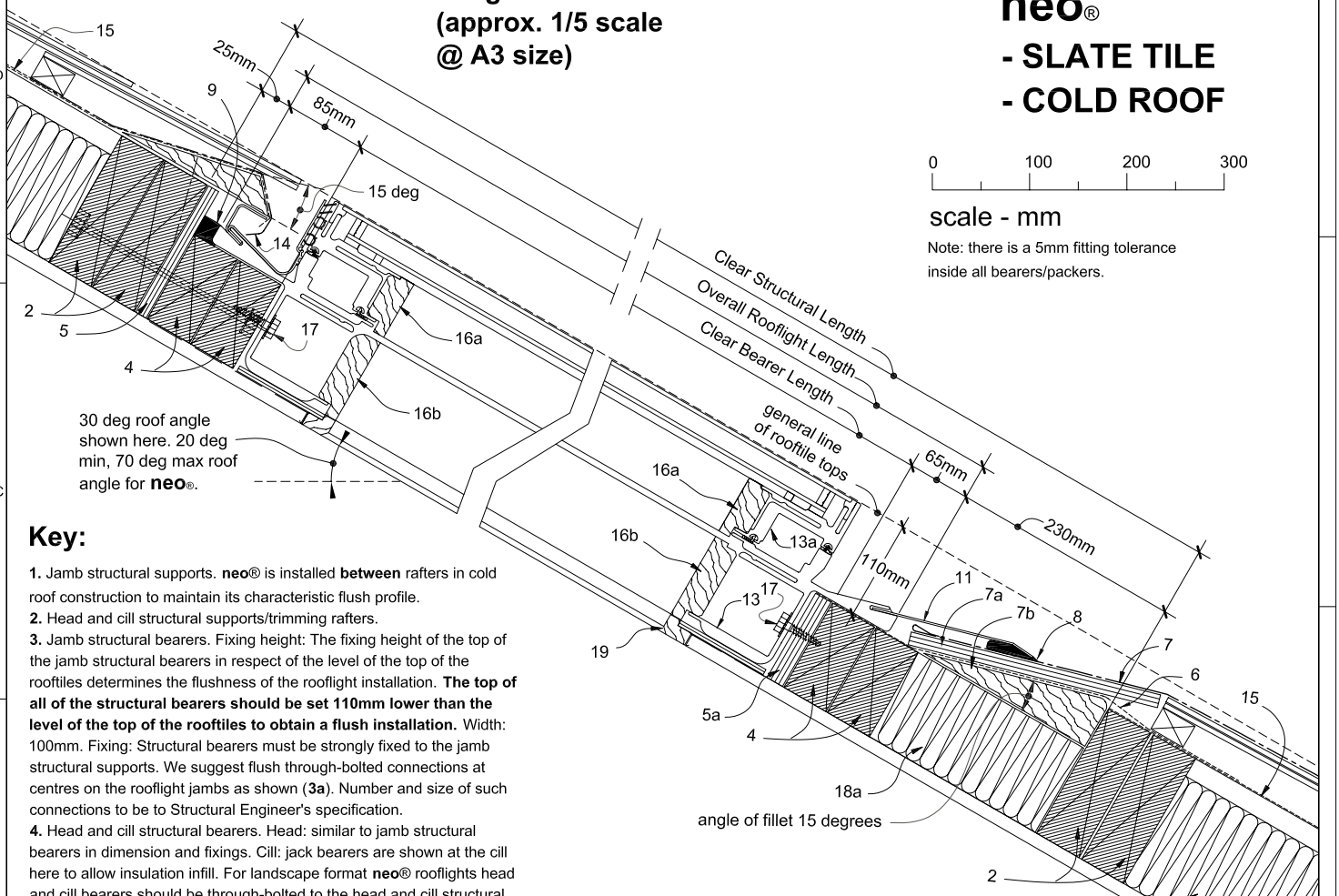


DRAWING IDENTIFICATION

SLATE ROOF FINISH			Page
Cold roof construction	drawing number:	NE_100INST	24
Warm roof construction	drawing number:	NE_101INST	25
CLAY TILE ROOF FINISH			
Cold roof construction	drawing number:	NE_102INST	26
Warm roof construction	drawing number:	NE_103INST	27

neo® - SLATE TILE - COLD ROOF

Long Section (approx. 1/5 scale @ A3 size)



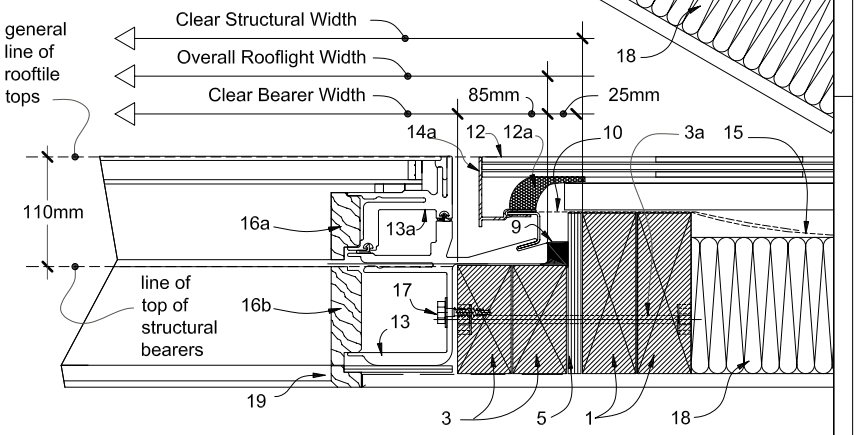
0 100 200 300

scale - mm

Note: there is a 5mm fitting tolerance inside all bearers/packers.

Key:

1. Jamb structural supports. **neo**® is installed **between** rafters in cold roof construction to maintain its characteristic flush profile.
2. Head and cill structural supports/trimming rafters.
3. Jamb structural bearers. Fixing height: The fixing height of the top of the jamb structural bearers in respect of the level of the top of the rooftiles determines the flushness of the rooflight installation. **The top of all of the structural bearers should be set 110mm lower than the level of the top of the rooftiles to obtain a flush installation.** Width: 100mm. Fixing: Structural bearers must be strongly fixed to the jamb structural supports. We suggest flush through-bolted connections at centres on the rooflight jambs as shown (**3a**). Number and size of such connections to be to Structural Engineer's specification.
4. Head and cill structural bearers. Head: similar to jamb structural bearers in dimension and fixings. Cill: jack bearers are shown at the cill here to allow insulation infill. For landscape format **neo**® rooflights head and cill bearers should be through-bolted to the head and cill structural trimmers through solid packing, and steel angle connectors considered for the trimming rafter/jamb structural member joints.
5. 12mm WBP ply lining to jambs and head. This provides a clean firm backing for the perimeter silicone seal. Ensure that the ply is clean, dry and free from grease and loose particles. **5a**. 18mm ply cill standoffs. Fix the rooflight through standoff blocks of 18mm ply at the cill. These space the rooflight away from the cill bearers to accommodate electrical wiring where required. Infill remaining gaps with insulation material.
6. Cill felt tray. Install a roofing membrane tray under the rooflight cill as shown. This is to pass down from under the rooflight cill and UNDER the ply cill substrate but OVER the tilting fillet and ends overlapping the general roofing felt at the cill as shown.
7. Cill flashing (supplied as part of the Flashing Kit). In severe exposures consider clipping down at centres and consider clipping down rooftiles also. Flashing sits on 15mm WBP or marine-grade ply substrate (**7a**) on a treated sw or hardwood tilting fillet (**7b**) with an internal fillet angle of 15 degrees. Lap the lead flashing over the tiles below by the rooftile-recommended headlap and welt it under the rooflight cill flashing piece as shown.
8. Lay a continuous thick bead of low-modulus neutral cure silicone across the cill lead flashing for the full width of the rooflight JUST PRIOR TO installation of the rooflight baseplate. Ensure that the fillet is thick enough to make continuous contact with the flashing and the cill flashing piece, and wipe away any visible excess.
9. Perimeter seal - to jambs and head. To be a thick continuous fillet of low-modulus neutral cure silicone as shown. This is laid in AFTER installation of the rooflight.
10. Jamb flashing aprons, part of the jamb flashing assembly (supplied as part of the Flashing Kit). They pass UNDER the battens but OVER the general roofing membrane. The battens are tacked in position at the rooflight jambs only until the Flashing Kit is installed and the jamb aprons are slid under them. Then they are fixed home.
11. Rooflight cill flashing piece. This is part of the rooflight assy.



Cross Section (approx. 1/5 scale @ A3 size)

12. Slate rooftiles. The jamb tiles are dry-bedded on the jamb weathering foam (**12a**) which is bent over and compressed under them as they are fixed down. Additional fixing holes or a mortar bed may be required under some tiles where only one batten fixing is possible.
13. Rooflight baseplate. Rooflight casement (**13a**).
14. Head flashing (supplied as part of the Flashing Kit). In severe exposures consider clipping down rooftiles. Jamb flashing assembly **(14a)** - UPVC soaker upstand.
15. General roofing membrane.
16. Rooflight linings. These are part of the rooflight assembly. The linings (**16a & 16b**) are preinstalled. The baseplate linings (**16b**) must be removed during installation to allow the fixing (**17**) of the Rooflight. Ensure the linings are refitted afterwards.
17. Fixing coachbolts (supplied with rooflight). These are screwed to the structural bearers through yellow-marked holes in the baseplate.
18. General roof insulation. Roof insulation between jack bearers (**18a**).
19. Internal finishes abutment to rooflight lining. To be specified by project designer. Here shown as a timber architrave to match the rooflight lining.

the Rooflight Company

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Title: **neo® rooflight - Suggested installation detail** — **- SLATE TILE - COLD ROOF**

Scale:	Date:	Drawing No.:
Do not scale	02/08	NE_100INST

Revision:			Drawn by:
E	19/05/10: Amended to incorperate Flashing Kit 01/09: Amendments to texts		pk

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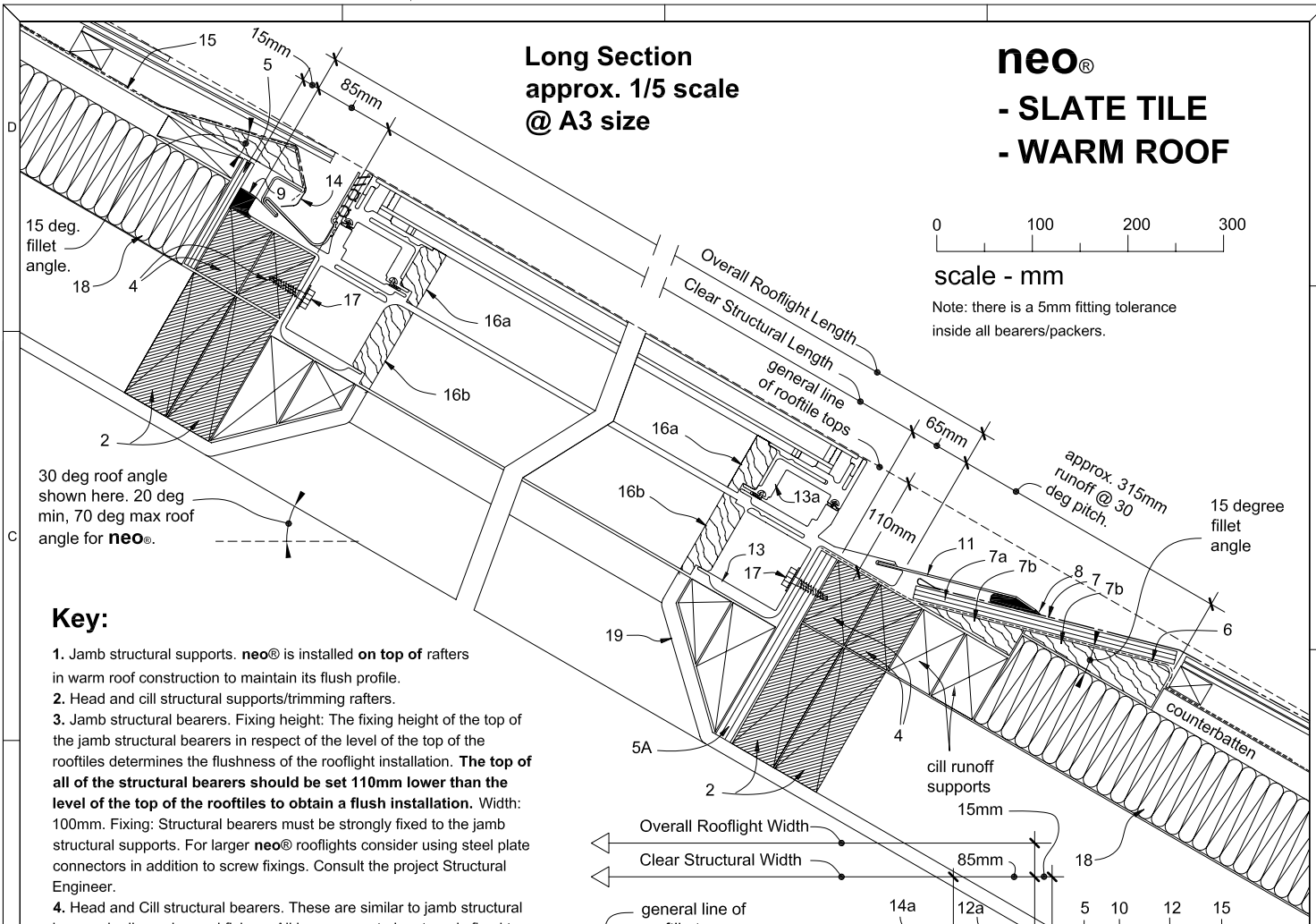
neo®
- SLATE TILE
- WARM ROOF

Long Section approx. 1/5 scale @ A3 size



0 100 200 300

scale - mm

Note: there is a 5mm fitting tolerance inside all bearers/packers.

Key:

1. Jamb structural supports. **neo**® is installed **on top of** rafters in warm roof construction to maintain its flush profile.

2. Head and cill structural supports/trimming rafters.

3. Jamb structural bearers. Fixing height: The fixing height of the top of the jamb structural bearers in respect of the level of the top of the rooftiles determines the flushness of the rooflight installation. **The top of all of the structural bearers should be set 110mm lower than the level of the top of the rooftiles to obtain a flush installation.** Width: 100mm. Fixing: Structural bearers must be strongly fixed to the jamb structural supports. For larger **neo**® rooflights consider using steel plate connectors in addition to screw fixings. Consult the project Structural Engineer.

4. Head and Cill structural bearers. These are similar to jamb structural bearers in dimension and fixings. All bearers are to be strongly fixed to structural supports below them. For larger **neo**® rooflights consider using steel plate connectors in addition to screw fixings.

5. 12mm WBP ply lining to jambs and head. This provides a clean firm backing for the perimeter seal. Ensure that the ply is clean, dry and free from grease and loose particles. **5a**. 18mm ply cill standoffs. Fix the rooflight through standoff blocks of 18mm ply at the cill. These space the rooflight away from the cill bearers to accommodate electrical wiring where required. Infill remaining gaps with insulation material.

6. Cill felt tray. Install a roofing membrane tray under the rooflight cill as shown. This is to pass down from under the rooflight cill and UNDER the ply cill substrate but OVER the tilting fillet and ends overlapping the general roofing felt at the cill as shown.

7. Cill flashing (supplied as part of the Flashing Kit). In severe exposures consider clipping down at centres and consider clipping down rooftiles also. Flashing sits on 15mm WBP or marine-grade ply substrate (**7a**) on a treated sw or hardwood tilting fillet (**7b**) with an internal fillet angle of 15 degrees. Lap the lead flashing over the tiles below by the rooftile-recommended headlap and welt it under the rooflight cill flashing piece as shown.

8. Lay a continuous thick bead of low-modulus neutral cure silicone across the cill lead flashing for the full width of the rooflight JUST PRIOR TO installation of the rooflight baseplate. Ensure that the fillet is thick enough to make continuous contact with the flashing and the cill flashing piece, and wipe away any visible excess..

9. Perimeter seal - to jambs and head. To be a thick continuous fillet of low-modulus neutral cure silicone as shown. This is laid in AFTER installation of the rooflight.

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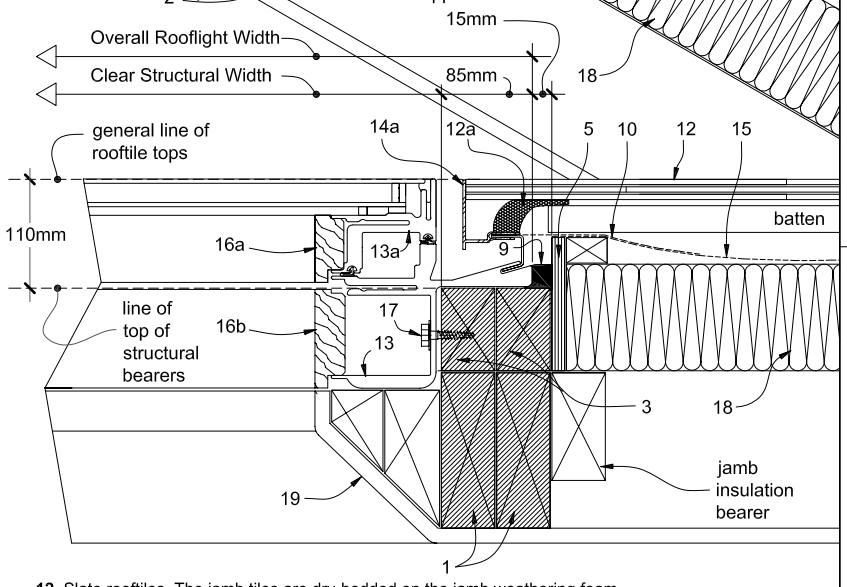

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13. Rooflight baseplate. Rooflight casement (**13a**).

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17. Fixing coachbolts (supplied with rooflight). These are screwed to the structural bearers through yellow-marked holes in the baseplate unit.

18. General roof insulation.

19. Internal finishes abutment to rooflight lining. To be specified by project designer. Here shown as plaster on expanded metal lath on shaped packers.

Cross Section approx. 1/5 scale @A3 size.

the Rooflight Company

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Title:	**neo® rooflight - Suggested installation detail**		**- SLATE TILE - WARM ROOF**
Scale:	**Do not scale**	Date: **02/08**	Drawing No.: **NE_101INST**
Revision:	**E** — 19/05/10: Amended to incorperate Flashing Kit 01.09: Amendments to texts		Drawn by: **pk**

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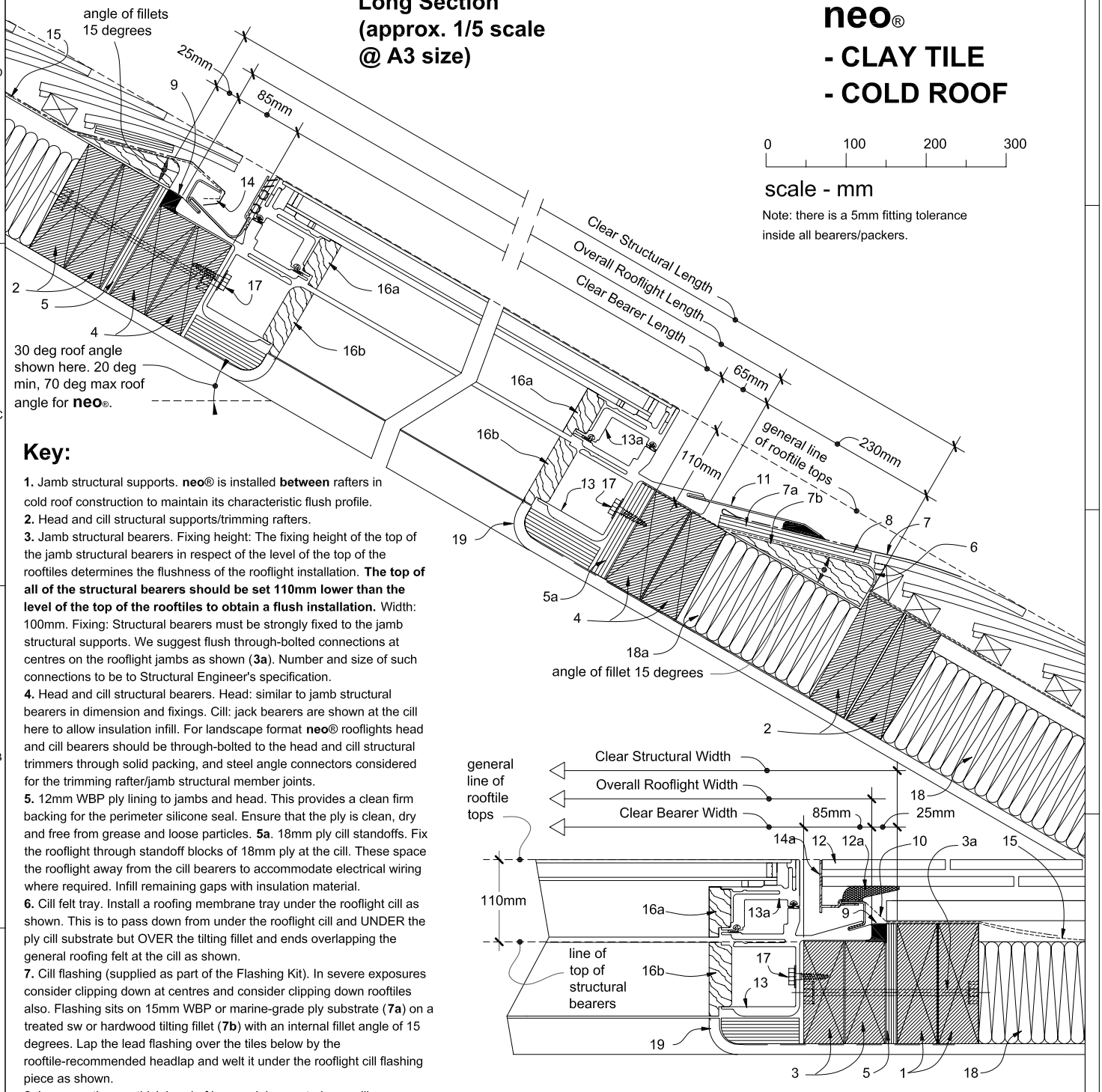
Long Section (approx. 1/5 scale @ A3 size)

neo®
- CLAY TILE
- COLD ROOF

0 100 200 300

scale - mm

Note: there is a 5mm fitting tolerance inside all bearers/packers.



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Cross Section (approx. 1/5 scale @ A3 size)

the Rooflight Company

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Title: **neo® rooflight - Suggested installation detail** - CLAY TILE - COLD ROOF

Scale: Do not scale | Date: 02/08 | Drawing No.: NE_102INST

Revision: E — 19/05/10: Amended to incorperate Flashing Kit; 01.09: Amendments to texts | Drawn by: pk

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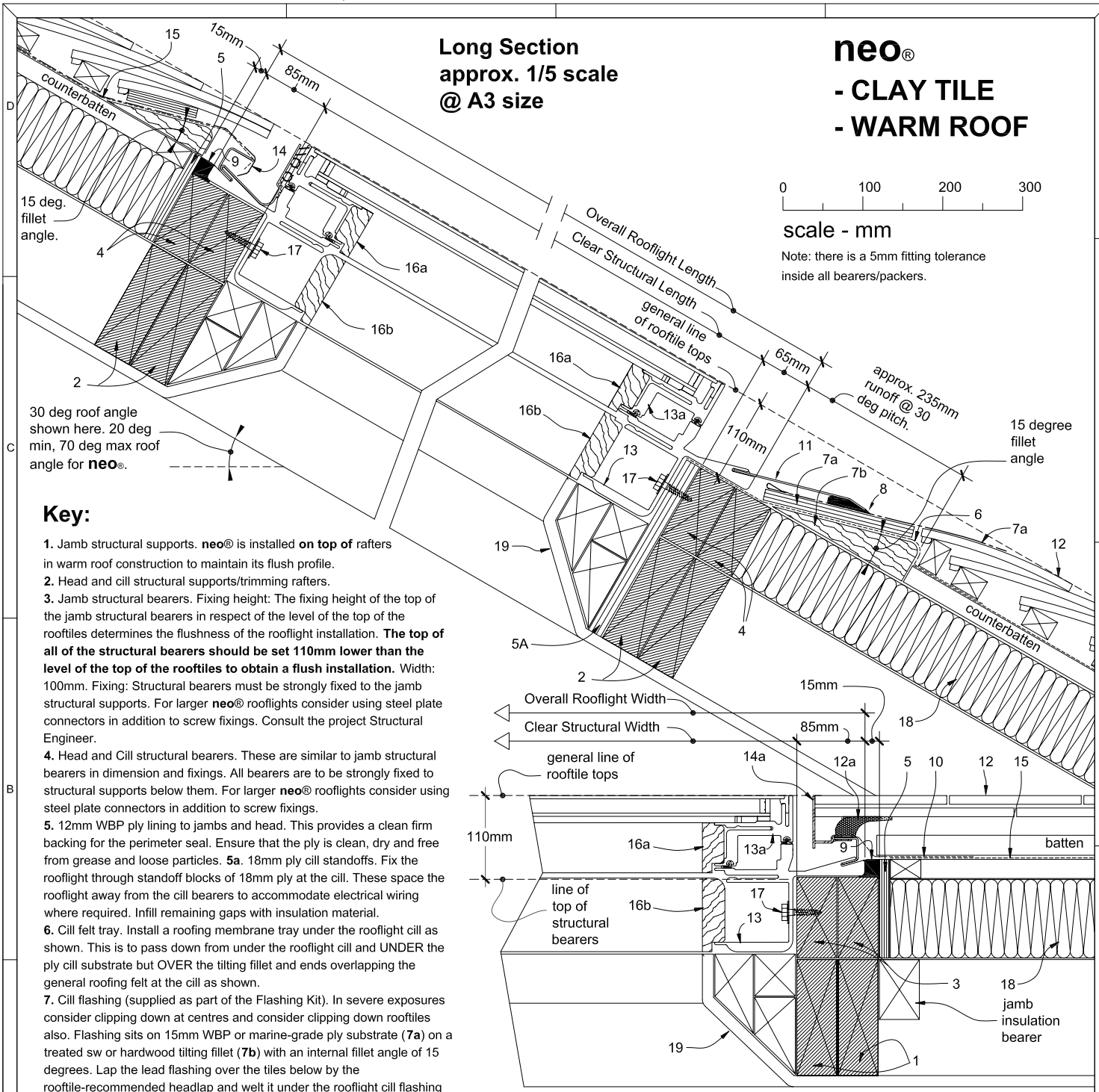
neo®
- CLAY TILE
- WARM ROOF

Long Section approx. 1/5 scale @ A3 size



0 100 200 300

scale - mm

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14. Head flashing (supplied as part of the Flashing Kit). In severe exposures consider clipping down rooftiles. Jamb flashing assembly **(14a)** - UPVC soaker upstand.

15. General roofing membrane.

16. Rooflight linings. These are part of the rooflight assembly. The linings (**16a & 16b**) are preinstalled. The baseplate linings (**16b**) must be removed during installation to allow the fixing (**17**) of the Rooflight. Ensure the linings are refitted afterwards.

17. Fixing coachbolts (supplied with rooflight). These are screwed to the structural bearers through yellow-marked holes in the baseplate unit.

18. General roof insulation.

19. Internal finishes abutment to rooflight lining. To be specified by project designer. Here shown as plaster on expanded metal lath on shaped packers.

Cross Section approx. 1/5 scale @A3 size.

the Rooflight Company

This is a suggested installation detail which may not be exactly applicable to all situations and constructions. It is not a detailed or constructional proposal. Installers and designers are advised to check their own details for compliance with all currently applicable Local Authority byelaws, Acts of Parliament and British/ISO standards.

Title: **neo® rooflight - Suggested installation detail** — **- CLAY TILE - WARM ROOF**

Scale:	Do not scale	Date:	02/08	Drawing No.:	NE_103INST
Revision:	E	19/05/10: Amended to incorperate Flashing Kit 01.09: Amendments to texts		Drawn by:	pk

All information contained within this drawing is Copyright and Designright of the Rooflight Company. The intellectual property rights of the products detailed within this drawing and embedded 3D models are owned by the the Rooflight Company. Do not scale from this drawing. Use figured dimensions only.

Care & Maintenance

To achieve the maximum service life from neo it is important that scheduled care and maintenance is undertaken. The following procedures are to be performed at least every six months, and more frequently in exposed or marine locations.

- **Rooflight cleaning** – Clean neo's glass, baseplate and casement, in particular the exposed external surfaces. Clean the baseplate and casement with warm water containing a weak solution of car wash fluid using a natural bristle brush, and rinse with clean water.

  Before cleaning, clear the exterior of the rooflight of any debris that may have collected. Excessive buildup of leaves, twigs, roof tile chips, etc can cause the rooflight to leak. Furthermore chemicals contained within the debris can have a detrimental effect on the paintwork finishes.

- **Glass cleaning** - On models of neo in which the casement can open to 90º (see 'Rooflight weights and opening angle') it is possible to clean the glass from the inside. On models that cannot achieve 90º casement opening cleaning can be effected from inside using a cleaning tool obtainable from the Rooflight Company. When cleaning from the inside ensure the casement is securely held open and **do not** put arms or hands through any of the moving parts.

- **Gas strut maintenance** - The gas struts that assist in the opening of the rooflight require to be operated at least once a month. This keeps the seals lubricated and helps ensure that pressure is maintained. The gas struts should also be kept clean and free of dirt - especially the piston rod. Wipe the piston rod with a clean dry grease-free cloth or a piece of clean kitchen towel.

Advisory

Standard rooflight: All the information provided in this document refers to a standard specification neo rooflight.

Install in accordance with this manual: The Rooflight Company cannot accept any liability if neo is not installed strictly in accordance with the instructions contained in this manual and implicit in the 'Suggested Installation Details'.

Structural support: Structural supports for neo are to be designed and supervised during construction by the rooflight installer's or project Structural Engineer.

Gas struts: neo has integral gas struts which assist the opening casement and support it when fully open. The gas struts are highly pressured and care is required when operating them. Do not attempt to adjust or dismantle them.

Rooflight weights and opening angle

When handling and installing neo its weight should be considered and adequate means employed to move the rooflight into position to reduce the risk of accidents..

Rooflight model	Approximate casement weight (kg)	Approximate baseplate weight (kg)	Maximum opening angle* (degrees)
neo 38P	28	26	90
neo 57P	36	31	50
neo 63P	37	31	50
neo 94P	49	38	30
neo 150P	65	43	N/A
neo 63L	37	31	90
neo 94L	49	38	90
neo 150L	65	43	N/A
neo 41S	28	26	90
neo 93S	47	35	90

Further Information

All of the images in this guide are diagrammatic (with some components omitted for clarity). They should be used as a reference and may not be a true representation of the installation.

Installation instructions are regularly reviewed and we reserve the right to update or amend these details without alteration to this guide.

* Please note: opening angles are approximate and may be slightly less than stated, due to the effect of gas spring balancing. Where ‘N/A’ is shown - rooflight models are fixed closed and do not open.

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the Rooflight Company

The Professionals' Choice

A trading name of the Metal Window Company Ltd.

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Assessed to ISO 9001
LPCB ref . no. 929

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